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A study concerned with the description of courses of action used by teachers successful in achieving classroom control is part of a larger effort to identify effective teacher behaviors which could be useful in training future teachers. The observation technique used followed a "rule-following" model (based on the Descriptive Psychology of P.G. Ossorio) with no attempt to reduce the complexity of teacher-pupil interaction in order to use a less complex system. Rating scales were developed on which observers ranked the correspondence between (1) observed teacher and class behavior and (2) statements of teacher policy and class reaction. Each of four raters observed four of 16 teachers in their best and worst classes (as identified by the teachers); each also provided measurements of the classroom control achievements (CC) of the teachers not assigned to him. A median split of the teachers in terms of CC formed a high and low grouping for testing hypotheses about the relationship between policy descriptions and CC. Results support continued development of rule-following description: it was applied by observers in a limited amount of time and did permit a discrimination between teachers who vary in classroom control achievements. (Included are discussion of Ossorio's concept of Person, the intentional action paradigm as applied to behavior description; the observer training manual; and the observation instruments.) (JS)

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An Observational Study of Classroom Discipline

Project No. 7-1-054
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Joseph F. Raney

August 1968

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University of Nevada

Reno, Nevada

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ABSTRACT

The complex interaction between teacher and pupils identified by the concept of classroom control has been neglected as a research topic by both educational and psychological researchers. Consequently, the training which Education majors receive is often regarded by teachers as inadequate in preparing them to deal effectively with the problems which arise in the classroom. The study presented here is the initial effort to develop a description of effective teachers which could be useful in training future teachers.

The conceptualization employed is based on the work of Ossorio (1966a). In essence, this means that teachers should be regarded as individuals who engage in intentional action, that they have a history of doing so, and that the type of behavior description to be employed must be as complex as the behavior being described. The type of descriptions used here is in accord with a "rule-following" model. Thus, there is no attempt in this study to artificially reduce the complexity of the teacher-pupil interaction in order to use a less complex descriptive system.

The method employed involved the observation of sixteen teachers in their best and worst classes (as identified by the teachers) for a period of ten hours in each class. Each of four observers was assigned four teachers and observed.

both classes of these teachers. The same observers were used to provide measurements of the classroom control achievements of the teachers that were not assigned to them.

The results would seem to support the continued development of the type of description employed here. A median split of the teachers in terms of classroom control achievements was accompanied by the hypothesized discrimination in an analysis of variance of the two groups in terms of the policies followed maintaining classroom control. The failure of the group by policy interaction to be significant, however, prevented an examination of the discriminating power of the individual policies. While it is recognized that further conceptual and empirical work is required before the final test of attempting to train teachers is undertaken, this initial effort provides strong evidence that the type of description used in this study is worthy of further exploration.

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CHAPTER 1

INTRODUCTION

To a person living during the social turbulence of the past decade, the relevance of much social science research to contemporary society must seem questionable. In an era of frequent racial riots, student unrest, open conflict over national policies, and even political assassinations, it would appear that any research which does not have direct connections with such social disturbances would require considerable justification, particularly if the research is supported by public funds.

Additional demands for justification would seem to arise from the criticisms of the social sciences, particularly psychology, by philosophers such as Louch (1966), Taylor (1966), and even from psychologists themselves (Ossorio, 1966a). Although it would be too much of a digression to investigate these criticisms in detail, the thrust of such authors seems to be focused on the "conceptual confusion" existing in psychology which results in trivial research and the isolation of psychological science from contact with behavioral phenomena that occur outside of a laboratory.

In a real sense, there is usually nothing of social significance that hinges on psychological research. If psychologists understand the phenomena identified in the first paragraph of this Introduction, it seems doubtful that such understanding stems from their scientific activities. Rather, such understanding would seem to be due to the fact that reasonable and intelligent men (even if they are psychologists) are able to make judgments on the basis of evidence that is not collected in laboratories by paper and pencil "instruments" and subjected to some "sophisticated" statistical data analysis. One need only read the comments and analyses of such social phenomena that are provided by social scientists to realize that they differ little in quality from that provided by other astute, but non-scientific, observers of the human condition.

It is because of the acceptance of the responsibility of the social scientist to the society in which he lives that an attempt is made here to provide social as well as professional justification for this research. Therefore, there are two bases upon which it is contended that the present study is justified: First, it is explicitly dealing with a problem which is of real importance to a large segment of the population (i.e., teachers), and if the ways that children are treated influences the kinds of adults which they become, the value to the society from improving the competence of teachers could be considerable. Thus, there is something that hinges on this study because it deals with a socially significant "practical" problem.

There will be no attempt here to deal with what has become a "sacred cow" in modern social science. To state that there is something that hinges on this study because it deals with a practical problem does suggest, however, that practical implications provide a criterion for assessing the worth of proposed research. Although the author accepts this as being the case, it is clear that many psychologists do not and the defense of "pure science" is one of the main refuges of those dealing with research projects that are difficult to relate to the "real world." The appeal to "pure science" (or to counterparts such as "theoretical significance") has become an explanation stopper in modern psychology and it is beyond the scope of this paper to provide an argument that would convince such psychologists that they exaggerate the significance of "pure science" as a justification of their activities. Moreover, it would probably be futile to do so. There is little doubt that if psychologists were to accept practical significance as a criterion for evaluating their work, they could be as clever in relating their work to practical problems as they now are in showing relationships to "theory." And this could probably be done without involving any significant change in their activities.

Fortunately, to accept social responsibility by using a criterion of practical significance to justify a piece of research does not require demolishing "pure science" as an alternative criterion. The recognition of this commonly used alternative, however, accents one basis being used to justify the present effort.

The second claim to justification of the present study stems not from the substantive content but the conceptualization employed. In this study, there is the attempt to deal with behavioral phenomena at the conceptual level appropriate to them. Consequently, no kind of reductionism is used to simplify the complexity found in the behavior of human adults. While the type of description employed in this study is one with which we are familiar as laymen, it is not commonly used (at least explicitly) by psychological researchers. The recognition that such is the case accounts for the rather lengthy presentation in Chapters Two and Three. Chapter Two presents the basic conceptual components of the work of Ossorio (1966a) and deals mainly with what is observed because this is an observation study. Chapter Three provides the conceptualization of the problem of classroom control which underlies the method used in this study.

The reasons given for justifying the present study made reference to the criticisms of psychology by modern philosophers, and the presence in the society of widespread disturbances which would seem to demand the exclusive attention of social scientists. An additional reason for providing such justification stems from the almost total lack of previous research which is directly relevant. This is not to deny the voluminous research that has been done on aspects of the educational process which are related to the concept of classroom control, but to deny that such research leads directly to the type of approach used in the present study.

The concept of classroom control is extremely complex. Since it is a concept that is primarily relevant to the actions of teachers (and not pupils), almost any action of the teacher can be redescribed in terms of this concept. Thus, a review of the literature dealing with classroom control would be an impossible task if it were to include only a small sample of the research that would be relevant to this comprehensive concept. Obviously, there will be no attempt here to deal with research that appears under such labels as motivation, learning and adjustment of students. However, it should be equally obvious that the teacher's ability to "motivate" the students, for example, is also a classroom control ability. It is such because this ability would be involved in achieving the objectives which teachers have, and the measure of this ability would be the extent to which the actions of students were influenced. In short, the concept of classroom control enables one to recognize that there are many distinctions among teacher actions that can be made; however, these actions are not themselves to be distinguished from classroom control actions. Thus, it is the concept of classroom control which provides unity and coherence to the studies which deal with different aspects of the teacher-pupil relationship.

To some extent, there exists in educational literature the tendency to use the term classroom control as a euphemism for "discipline." "Euphemism" is an appropriate term here because the most common usage of "discipline" has apparently undesirable connotations for some educators. However, as Bowman (1959) has pointed out, the term "discipline" has many different uses, not all of which are concerned with the teacher's punitive response to classroom deviance.

No attempt will be made to explore the conceptual relationships that exist among such terms as classroom control, classroom management, discipline, etc., other than to emphasize that the concept of classroom control is not limited to the teacher's responses to deviant pupils. Nevertheless, it is "discipline problems" which indicate the value of the broader concept of classroom control because they are generally regarded as an index of the teacher's lack of ability to control a class. It is obvious, then, that the absence or infrequency of discipline problems indicates actions by the teacher which are relevant to the incidence of deviance but which may not be direct responses to deviant students.

The usual response by researchers studying discipline problems, however, involves regarding them as a "disruption" of the relationship between the teacher and class. This conceptualization of discipline problems results in the failure to see that there can be some description (provided by the concept of classroom control) under which teaching and disciplinary actions are "the same." Consequently, there is a tendency to overlook the integrity of the teacher-pupil relationship and conclude that discipline is a topic which can be treated independently of the total classroom setting. Thus, a line of research restricted to the immediate response of the teacher to a deviant action seems plausible.

This was the approach used by Kounin, Gump, and Ryan (1961) which they introduced by saying:

> The origins of the researches to be summarized here lay in the authors' feelings of inadequacy in trying to help teachers, especially beginning ones, with problems of importance to them. Teachers' questions about "what to do when Johnny disturbs" have been shrugged off with impatience, or have been answered with slogans or "principles." Scientific research about the technology and theory of controlling misbehavior in a classroom is either lacking or inadequate (p. 235).

Unfortunately, the types of research which are summarized by these authors seem to be just as "inadequate" as those to which they make reference. The experiments were carried out in a classroom setting but involved the use of a person who was not the regular teacher. The time required for the experiments was very short. The effectiveness of the techniques used (verbal responses of the "teacher" to a stooge) was measured immediately, not in terms of subsequent deviancies, but in terms of responses on a rating scale which dealt with questions as to how fair the student regarded the technique, whether he liked the person acting as the teacher, and if he felt like behaving in a deviant fashion after observing the technique. Nevertheless, the effects upon other students of a given verbal response by the teacher to a deviant student are undoubtedly relevant to consider in exploring the general problem of classroom control. A more suitable approach, however, would require consideration of the natural setting of the classroom with the regular teacher in attendance.

In this respect, the author is in agreement with the position taken by Medley and Mitzel (1962):

> Underlying this approach is a fundamental postulate which should be stated explicitly. If we disregard incidental contacts between teachers and pupils outside the classroom, then any effect the teacher has on the pupils is mediated by some overt classroom behavior on the teacher's part. Since the behavior takes place in the classroom, it is therefore capable of being seen by a properly trained observer (p. 317).

While the above statement sounds plausible, one has to be cautious if he is not to be misled. It is unlikely, for example, that one could attach a great deal of significance to any single action of a teacher, whether a verbal response as studied by Kounin, Gump and Ryan, or any other type. One would certainly note (as has Ossorio, 1966a) that an action derives some of its significance from the series of actions of which it is a part. Thus, while both good and poor teachers could engage in an action that might be judged "the same" on the basis of limited observation, one could grant without reservation that the actions could be parts of different series and thus would have different meanings.

In regard to the actions that teachers take when faced with apparent threats to their control of the classroom, it is interesting to note that many teachers do not find their college training to be of much value. Rather, it was "family, pre-college or college extra-curricular experiences" which the teachers identified as providing the abilities to deal with the "human relations" problems in the classroom (North Central Association Quarterly 1963). If such is the case, it indicates a deplorable deficiency in teacher training. Whether such research as is reported here can help to eliminate such a deficiency remains to be seen but it is clear that the family and extra-curricular experiences of Education students cannot be a substitute for an adequate training program.

Thus, although some attempts have been made to deal with discipline problems, the comment by Woodruff (1960) in the Encyclopedia of Educational Research is still appropriate.

> The concept of discipline or of disciplinary procedures as a characteristic of the conditions under which learning occurs presents some serious problems to the conduct of research, as evidenced by the fact that as of this publication there is still almost no research to report on that concept as such (p. 381).

Perhaps the absence of research on this topic reflects the recognition by educational researchers that it is not a topic which can be studied independently of the rest of the teacher-pupil interaction. Unfortunately, there do not seem to be any attempts by such researchers to deal with the teacher-pupil relationship--in a way that would be: 1) sufficiently comprehensive to include all the actions of the teacher relevant to classroom control; and 2) suggestive of content to be used in training future teachers so that the college curriculum can be made more relevant to the demands made upon the classroom teacher. The present study then, is an attempt to deal with the complexity of the teacher-pupil relationship in the hope that an approach which takes this complexity into account might lead to the development of an adequate teacher training program.

There is little point in assimilating the problems of the classroom teacher to those identified by sociologists as ones involving "social control." The implication of such an approach would be that all such problems are "the same" under some description, and therefore the most fruitful approach would be to identify how the teacher's problems are the same as those of the summer camp director, the university president, the army first sergeant, the police, and the federal government, among others. This of course makes the junior high school student "the same" under some description to the alcoholic, the prostitute, a minority group, a military unit, and any other individuals or groups whose behavior is discrepant from that which is defined as acceptable. It may well be the case that under some description junior high school students are the same as these others, and that the teacher is the same as those who have the function of establishing and maintaining behavior expected of others. But the resources available to teachers vary considerably from those available to others who might be like her under some description; and the junior high school student differs in so many respects from those who would be like him under some description that there seems little to be gained by identifying such a similarity. The concept of classroom control seems sufficiently complex for consideration of the teacher-pupil relationship, and until more data are available about this relationship, it does not seem advisable to accent similarities with other relationships until one can describe similarities and contrasts with greater precision than is now possible.

In sum, then, the work presented here is of dual interest. First, the substantive content involves the practical problem of identifying something which could be useful in training future teachers to have greater competence in classroom control. Second, this work makes use of the conceptualization of Persons provided by Ossorio (1966a), which is independent of any particular substantive content. In the next two chapters, it is shown how this conceptualization facilitates the exploration of classroom control.

CHAPTER 2

CONCEPTUAL FRAMEWORK EMPLOYED

The conceptual framework employed in this study is that provided by Ossorio (1966a). Since only selected aspects of this complex position are presented, it must be recognized that the presentation may be somewhat misleading due to the inability to point out all of the interrelationships which make the system what it is. Consequently, the reader is encouraged to explore the position as presented by Ossorio himself (see References).

For the reader who is totally unfamiliar with his work, a brief characterization of Ossorio's position may be helpful before examining the specific aspects which are directly relevant to the research presented here. First, it should be emphasized that Ossorio has not provided a theory of human behavior as that term is traditionally used in psychology, but is attempting the development of what he calls a Descriptive Psychology which will identify the subject matter of psychology. Apparently, it was the inability to identify psychological subject matter independently of particular theories that called for such a description of the subject matter. This inability made it impossible for a neophyte (or veteran for that matter) to compare positions of the various theorists in regard to particular topics as the topics were defined in terms of the theories. A description of subject matter which was independent of theoretical stance and jargon would eliminate this type of difficulty.

For Ossorio, the subject matter of psychology is Persons. "Persons" is used here as referring to a concept but as human beings are the paradigm cases of Persons, they are the obvious subject matter of psychology. This should not be taken as a derogation of those investigators who are interested in other subject matter, but it is an attempt to provide a description of psychological subject matter rather than simply defining psychology as the "study of behavior" or "that which psychologists study." Ossorio's task consists mainly of explicating what he regards as a distinctive descriptive system (i.e., one which cannot be replaced by another descriptive system) which is the type of descriptive system provided by Person concepts. In doing this, he is able to show that extant theories of psychology are all incomplete and severely limited in what they are able to deal with due to the lack of linguistic resources for description of complex behavior. However, as Ossorio has pointed out, theoretical deficiencies are often overcome by the implicit (and apparently unrecognized) use of the Person concept.

In performing this task of delineating the subject matter of psychology which would be independent of particular theoretical formulations, Ossorio has been strongly influenced by what has been called "ordinary language" philosophy. It should be emphasized, however, that

Ossorio does not see his work as being "philosophical" in two important senses: 1) Although his position involves dealing with the logical connections of concepts (particularly Person concepts), he does not pursue this aspect of his task in the fashion characteristic of the analytic philosophers; 2) Ossorio maintains that the task of defining the subject matter of psychology is a psychological task. It is his contention that psychologists have been unduly influenced by philosophers (particularly philosophers of science) by permitting such philosophers to define, not only the subject matter, but the model (i.e., the "semantic" model) to which empirical research should conform. In contrast, Ossorio urges psychologists to liberate themselves from undue influence by recognizing that psychology is an autonomous science which is not dependent upon philosophy for a definition of its task. Nor should psychology be burdened with restrictions on theory or methodology which arise from advocates of the "Unity of science" position. It is the primary task of psychology to provide an adequate account of human behavior. If theories and methods satisfy a secondary criterion of being in conformance with what is known about humans from other sciences (e.g., physiology), that is to be valued but it should not determine the procedures required for performing the primary task.

According to Ossorio, a description of the subject matter can facilitate the recognition of the autonomy of psychology which would not only unburden it from the restraints imposed upon it, but would also illuminate the subject matter in a way which would encourage the exploration of the complexities of human behavior.

PI The Intentional Action Paradigm

The paradigm case of the behaving individual is a Person (capitalization is used here to denote that it is the concept that is being dealt with and not any particular person, animal, or object). A Person is to be understood as one who has a history of intentional actions, and the person descriptions with which we are all familiar involve, in one way or another, the classification of these actions.

As a concept, intentional action has at least four logical parameters: 1) Know, 2) Want, 3) Know-how and 4) Performance. These are discussed more extensively for two reasons: a) They provide the bases for the various types of behavior description which Ossorio has delineated; and b) by the identification of these as the structural (logical) aspects of intentional action, it is possible to see how the descriptions presently used in psychology depend upon the concept of intentional action without identifying it as such (and in fact, in some cases, strenuously denying that intentional action is a concept that is relevant to a behavioral science).

The heuristic device used by Ossorio for the intentional action paradigm is a diamond with the four corners labeled with the parameters identified above. The Know parameter calls attention to the fact that to engage in intentional action requires distinguishing something from something else. At the minimum, the Person is able to distinguish what he wants from other things. More complexly, the Know aspect directs attention to the concepts that a Person uses (including the Person concept). There is no entailment here that the Person is aware of the distinctions that are involved in his behavior in the sense of being able to articulate them if he were asked to do so; but conversely, neither is it implied that he could not. The point being made here is that making distinctions is a logical requirement of the concept of intentional action but there are no implications about the state of awareness of the Person.

The Want parameter denotes that the Person wants something or has a reason for doing something. That this is a logical requirement is probably most easily understood as it would be unintelligible to speak of intentional action where nothing was wanted. The major problems arise with this parameter when it is seen as a "mental cause" of the action observed. A point which requires emphasis, then, is that this, like the others, is a logical feature of intentional action.

The Know-how parameter identifies the logical requirement that an intentional action is not an accident nor a coincidence but something that the Person knows how to do.

Intentional actions thus reflect a learning history although there is no entailment here that a particular intentional action requires a particular learning history. Thus, while all intentional actions reflect a learning history in that they are repeatable, with appropriate variations depending upon circumstances, this requirement does not entail a commitment that "the same" intentional actions reflect the same histories.

The Performance parameter of the intentional action paradigm has provided Ossorio with some difficulty. Or, perhaps more accurately, it has provided readers of Ossorio with difficulty in that there is some confusion as to what feature, logical or otherwise, of intentional action is being referred to by this term. As a consequence, Ossorio has changed the name of this logical feature from "try to get" to "overt attempt" and is currently using "Performance." The confusion seems to arise from mistakenly assuming that the Performance refers to observable behavior (although Ossorio contributes to this confusion by identifying it as observable on pages 10, 71, and 80 in Persons, as well as in other places) which occurs after the "internal processes" of Know and Want. That this cannot be the case is clear from Ossorio's criticism of "underlying process theories" and the "psychologist's lament" that the true understanding of behavior may forever elude us because the "causes" of behavior are forever hidden from us in internal processes which we can only infer, and which limit us to sophisticated guesses as to their true nature.

It should be emphasized that the logical features of the concept of intentional action discussed here are not to be segregated into observable and non-observable components, nor is there a temporal dimension suggested with Performance being the last in a series of four separate events. Rather, these parameters are logical features of the concept of intentional action. They are involved in the distinctions that we make between one action and another. They are not dependent upon observation in the sense that we generally conclude that an action has occurred when we observe, or can identify, the four parameters. Rather, the determination that there were such parameters was the product of the thoughtful consideration of intentional actions.

At the risk of being redundant, but because this has been such a confused issue in behavior description, it should be emphasized that the concept of intentional action implies the logical parameters (including Performance) which have been identified. There is nothing in the logic of the concept which entails anything about the observable nature of these parameters. However, intentional action is observable, and it may seem uninformative to assert that one observes intentional action but not its logical features.

Here, someone might be inclined to say "But what is it that the individual really observes which enables him to speak of intentional action?" or "What is it that is really going on which the individual observes as an intentional action?" Unfortunately, to ask such questions is to miss the point entirely. To be able to answer such questions would imply that we can have a contact with "reality" which would be independent of our conceptual development. Such questions imply that it is only our conceptual and linguistic inadequacies, and not the lack of cognitive contact, which prevents us from dealing effectively with "reality." An extremist of such a position might even suggest that the development of language has been like the dropping of a transparent curtain between us and reality so that we, with our concepts and language, are on one side, and reality on the other. Thus, unlike Plato's cavemen, we can see reality clearly but it is our talk (i.e., concepts) about it which is shadowy, elusive and misleading.

Since this is not a philosophical treatise, there will be no attempt made here to reply to the advocate of such a position other than to simply deny that this "position" represents any real alternative. As Ossorio has pointed out, language codifies what people know how to do; since there is nothing in human behavior which hinges on having such a "prelinguistic access to reality" there is nothing of that sort which is missing in the accounts of behavior that we know how to give. The "shadowy, elusive and misleading" characterization of language presented above nurtures the "psychologist's lament" that we can never know what is really going on, but as our behavior does not depend on that kind of knowledge, it is an apparent and not a real lack.

As mentioned previously, to speak of intentional action is to imply the logical parameters of Want, Know, Know-how and Performance. In this connection, it is the Performance which offers the most difficulty because there is obviously something about the Performance feature of intentional action which should lead to the confusions mentioned above (and in more detail below).

"Process characteristics" is the term now used by Ossorio to illuminate the logical feature of intentional action to which Performance refers. All actions are processes in that they occur in time and space and have a beginning and ending. It is process characteristics which a movie camera would, primarily, record. For example, if one took motion pictures of a man throwing a ball, each frame would show the man's arm at a different angle relative to his body. These different angles could be measured but it should be clear that it would not be the action which was being described. This is so because "throwing a ball" is the action which an observer would see, and no geometric measurements or descriptions could, per se, represent that phenomenon.

For an understanding of Ossorio's position (and because the study presented here is an observational one), it is crucial that the reader understand why the Performance is not the observable part of the intentional action with Want, Know, and Know-how being unobservable. It is at this point that Ossorio deviates most from the traditional description of scientific activity because it is here that the starting point for many of his criticisms of traditional scientific methodology and theory can be found.

First, to think of the Performance as a visible and distinctive part of an action results in the belief that we can study "behavior" (i.e., the Performance) without a concern with "mentalistic" concepts such as "intentions" and "wants" or other such notions because we could restrict ourselves to what was observable and thus build a science upon the basic units of behavior. If this were true, "behavior" could be seen and measured and provide a basis for public activity and would not depend upon the imagination of the researcher to provide an account of some "behind the scenes" activity which occurred on some ghostly stage in the mind. All that would be necessary would be to establish correlations (or "functional relationships") between the environmental setting (both past and present) and the "responses" which an organism made. This would enable not only an "understanding" of the behavior in a causal sense but would also enable us to produce responses by manipulating stimuli which occurred either before or after the response.

The nature of the criticism being offered here is not to deny the degree of success achieved by behaviorists in "shaping behavior," but to challenge the account which they give of what it is that they are doing. And the criticism is simply that they have made use of the structural aspects of the intentional action paradigm while denying that this paradigm guided their behavior in designing their experiments. As an illustration, compare the concepts of "deprivation," "discriminative stimulus," "reinforcement history," and "response" with Want, Know, Know-how, and Performance. It is not simply a question of the *words* that are employed to denote these parameters of intentional action, or that any set of terms can be regarded as valid as any other set. It is the implicit use of the intentional action paradigm (as opposed to the explicit use which would enable one to see the relationships of intentional action to the more general paradigm, i.e., the Person). In the denial that this is the paradigm which guides their own behavior, behavioristic psychologists talk as though they have access to some "raw sense data" in the form of "responses;" thus, they do not recognize that the identification of something as a "response" is a reflection of their own skills (i.e., Know-how--which includes knowing how to use the concept of intentional action), and not some Given which is independent of the concepts they employ.

Such a belief in a Given is an illustration of the "empiricist myth," according to Ossorio, and implies that what we do is simply "read off the features" of that which is observed. It is doubtful that psychologists are so naive that they would subscribe to such a notion when presented in this form (i.e., they would recognize, for example, that training makes a difference in observation reports) but apparently it is still not clear to many psychologists that there is no "prelinguistic access to reality" which enables us to "baptize referents" with words.

Thus, the notion that the Performance is the observable part of the intentional action which could be identified and described independently of other parameters of intentional action has been the source of many blind alleys. Another such blind alley stemmed from the fact that we not only do not observe the Performance with the other structural features being invisible, but we have no linguistic resources to describe the Performance as such independently of identifying the action. Attempts to remedy this apparent lack by developing a "physicalistic language" or by providing physical descriptions of actions have not been successful. The main reason for such failures is that we generally do not observe body movements but actions and no description of the body movements involved in an action carries any intelligibility as a description of behavior. (See "throwing the ball" illustration above. For an example of arguments for "physicalistic language," cf Carnap, 1959, especially page 182. This article was originally published in 1932.)

Curiously, the theories involving "mentalistic concepts" which the behaviorists resisted also developed from the misconception that the Performance was the visible portion of behavior. In regarding the Performance as visible and yet recognizing that there was more to be said about behavior, many psychological theorists attempted to develop extensive accounts of the "something else" which had to be present but which was not available to observation. In Ossorio's terminology, these are the "underlying process" theories which "fill in" what is missing.

Unfortunately, such attempts to account for behavior result in severing the contact between the structural features which are logically interrelated, and this has prevented the development of an adequate account of behavior. This is so because it was inevitable that such theorists regarded the Performance as something which required explanation as opposed to the action, and thus the explanations that are offered are of the "behind the scenes" sort. This often results in what Ossorio has called the "psychologists' lament" since these explanations (which usually take the form of mental causes) occur behind the scenes and we can never be "really sure" about what is going on. Paradoxically, and due to the fact that such theorists could not escape from the intentional action paradigm in their conceptualizations and observations of behavior, the net result of such theories has been the recasting of the structural features of the paradigm into technical jargon which derives its explanatory value, not from the supposed mental causes that are the antecedents of observed Performances, but from the role that these parameters play in the complex conceptual system (i.e., the Person concept) of which they are a part.

There is one additional mistake which could be identified as resulting from regarding the Performance as that which is observed as opposed to regarding the action as the unit of observation. This is the development in psychology of the methodological procedure known as operationism. A procedure such as operationally defining constructs could only develop when it was believed that the real substance of behavior was the observed Performance. Thus, the function of operational definitions was to restrict the constructs to the observed Performances rather than to the actions for which the constructs had relevance. Not unexpectedly, the definitions provided by this procedure had little resemblance to the richness of the concepts (and thus behavior) that were supposedly involved in experimental designs. It would seem clear now that the practical significance that operational definitions had for research psychologists was not one of definition, but the impact which they had in clarifying the procedures used by experimenters. Unfortunately, the ease with which complex concepts can be given some operationalization has resulted in much research which has little to do with the phenomena which the researchers were presumably investigating.

In summary and conclusion, intentional action is a concept with at least four parameters. It is these parameters that are involved in the distinctions we make between particular actions and between types of actions. These parameters are logical aspects of the concept and are not to be regarded as four distinguishable parts of an action which are separately identified by close observation of an action; but neither are they hidden from observation because they are "intra-psychic processes" which occur "off stage." In being logical features of a concept, they could not be either of these.

This section has attempted to indicate some of the difficulties which have emerged in psychological description as a result of regarding a logical parameter (i.e., Performance) as the observational base upon which to build a science. These difficulties have developed because psychologists have mistakenly assumed that "responses" could be identified and described independently of any conceptual implications about the other parameters of intentional action. It is in this sense that Performances were regarded as observable and thus distinguishable from other parameters.

In noting that actions are processes, which means that they can be dated and clocked, and that Performance identifies this feature of actions, it must be remembered that it is the action and not the Performance which is placed on a temporal dimension. This is merely another way of emphasizing that it is the action and not the Performance which is observed.

The parameters of intentional action are not observable features of the actions but are the bases upon which we distinguish between actions. Thus, we can distinguish between actions on the basis of what is wanted, the distinctions that different actions require, the differences in skills involved, and the process characteristics (i.e., Performance) which vary with different actions. As it is the Performance which is the troublesome feature as far as the role of observation is concerned, it has been repeatedly emphasized that Performance does not differ from the other parameters in this respect. This emphasis has seemed necessary because of the types of psychological description that have developed as a consequence of regarding the Performance as observable. The following illustrations are presented in the hope that they will clarify any misconceptions which are still present.

Consider the following:

1) "He closed the door because he was cold."

2) "He closed the door because of the noise."

These two actions would seem to be clearly distinguished on the bases of the Want and Know parameters (but not on the bases of Know-how and Performance, although these parameters are obviously implied in these action descriptions).

3) "He closed the door with his foot."

4) "He closed the door carefully."

These two actions are distinguished on the basis of process characteristics (as opposed to distinguishing them on the bases of Want, Know, Know-how, although these parameters are implied in those action descriptions). It is important to note here that what was observed was two actions, not two Performances, although we distinguish between the actions on the basis of the Performance parameter. In articulating actions into the PII paradigm (i.e., the Person), it is the Performance parameter which enables us to give such style or trait characterizations as "neat," "cautious," etc.

On the basis of the foregoing illustrations, it should be possible to see why Ossorio refers to the Performance parameter as being the one which is most easily "established." It is not that the Performance is observed and the other parameters are not, but that the process characteristics of actions do not require looking beyond the immediate actions in order to establish them (in fact, it would be impossible to do so). In establishing other parameters, it is often necessary to have more extensive observation (e.g., a single hit on the bulls-eye by an arrow could have been luck rather than a reflection of Know-how). This is not the case for all actions, however, and the magician offers an example. His magic (i.e., sleight of hand) depends upon our inability to establish the process characteristics of his actions.

Because we can generally establish the process characteristics by the observation of an action, it is possible for us to speak of Performances in an attempt to be non-committal, not only about what kind of action it was, but whether it was even an action that we observed. This may seem paradoxical, but not if one recalls that we observe intentional action even though we cannot establish all of the parameters (i.e., we may not know what a person wants but we do not doubt for a minute that he is engaging in intentional action if it can be established that he is making distinctions). Similarly, if we are unable to establish whether distinctions are being made, what could be wanted, and whether a learning history is reflected in the Performance, then we cannot establish that it was even an action that we observed. However, it is important to realize that we are able to do this because we observe actions. Thus, anything that we observe could be an action but our own lack of skill may prevent us from establishing the parameters involved. Perhaps this point can be better understood by recalling that it is difficult for the young child to learn to give descriptions which are non-committal relative to the parameters of action, and thus it is not surprising that he could ask, "Why is that man shaking his head?" when observing a victim of cerebral palsy. The child sees the shaking as an action and seeks to establish the reason for someone doing that; we do not see it as an action, not because of something which is present or lacking in the immediate observation, but because we have learned to distinguish between actions and certain types of movements. It is this distinction which is obliterated by psychological descriptions which regard the Performance as the observable basis upon which to build an empirical science. It should be obvious that such empirical psychologists did not confuse this distinction in their research, but their attempts to conceptualize their activity as one which did not require a consideration of the parameters of intentional action has resulted in conceptual confusion and the pursuit of many blind alleys.

PII The Person

Conceptually, the Person concept is related to the concept of intentional action as a whole is to a part. Person descriptions (i.e., personality variables) are constructed by arranging series of intentional actions into different logical formats. Thus, person descriptions are, in a logical sense, functions of intentional action descriptions.

The myriad of person descriptions has tended to bewilder psychologists who have regarded them as elusive and lacking in the precision which scientific description demands. A frequent response has been to forsake the use of such descriptive terms in favor of new terminology which does not have the surplus meanings which loose ordinary language descriptions have. Another response has been to "operationalize" the concepts employed such that what was previously loose and perhaps misleading was made rigorous and scientific.

To Ossorio, the presence of thousands upon thousands of person descriptions is not cause for the abandonment of linguistic development which has occurred over centuries. On the contrary, his lead would suggest that we not forget our language but become more familiar with it. The nature of the familiarity that he urges does not develop from the extensive analysis of particular concepts (e.g., as is practiced by "ordinary language" analytical philosophers) but from seeing the "logic" of person descriptions. That is, the Person concept is a complex concept with component concepts which are linked in systematic ways that need to be explicated. Such an explication (which Ossorio sees as his primary task) would let us see the "principles" (i.e., logic) that underlie the production of person descriptions, so that the sheer number of such descriptions is irrelevant.

A Person is an individual whose history is a history of intentional actions articulated into the paradigm of PII. By this statement, Ossorio has indicated the part-whole relationship that exists between the concepts of intentional action and that of Person. Where the PI paradigm (i.e., intentional action) is the "universal law of behavior," PII (i.e., the Person) provides the basis for individual differences. Thus, for Ossorio, there is no conflict between "laws of behavior" and individual differences. Consequently, there is no need to explain deviations from universal laws since the universal law of intentional action and the individual differences which intentional action permits are compatible.

Behavior Description

As every description is somebody's description, it is obvious that giving a description is an intentional action and in being this, a description reflects the describer's knowledge, motivation and skills. These parameters of intentional action are reflected in behavior descriptions in two important ways: 1) in the scope of the description and 2) in the degree of commitment which the describer wishes to make. (Thus, we call attention again to the fact that giving descriptions is not "reading off the features" of that which is described.)

In categorizing descriptions of behavior, Ossorio has delineated seven types of description. These are: action, course of action, deliberate action, activity, performance, social practice and institution. Perhaps it should be pointed out immediately that while these types vary in generality (i.e., scope), none is to be considered as more "basic" if by basic it is implied that giving the description simply reflects the fact that this is what "really" happened. It was this type of concern which led earlier philosophers to believe that descriptions could be more and more basic until there was a one-to-one correspondence between the words used and the "reality" which was being described. Thus, the development of a "physicalistic language" was an important goal in this orientation. This orientation is rejected by the recognition the descriptions are not "word pictures" of reality but are actions involving what the describer knows, wants, and knows how to do.

In an action description, the describer commits himself to a statement about all four of the parameters of intentional action (although these parameters are not explicitly identified as such). That is, the describer is stating that the observed person could distinguish something from something else (Know), that he had a reason (Want) for doing what he did, and that the process characteristics (Performance) reflected learning (Know-how) and were not the result of accident or chance. This is the fullest commitment that an observer can make in giving behavior descriptions but it should be noted that as not all actions are intelligible in themselves, neither are all action descriptions. Thus, in a description, "He is getting a blue rock from that cliff," it may not be clear why anyone would want a blue rock even though we could accept the description that intentional action was involved in obtaining it.

This lack of clarity points up that the paradigm case of intentional action is one which is undertaken with "no further end in view" and is thus intelligible in itself. That is, there is no lack of intelligibility or need for further information if one should hear the above description at a geologists' outing. The intelligibility comes not merely from placing the description in some context, but in a particular context, and this context is one of a body of social practices of geologists.

Action descriptions have the intelligibility that they do because we are able to understand engaging in an action for its own sake. Without this kind of behavior, we would never be able to give any kind of intelligible behavior description as it is the possibility of having this kind of intelligibility that prevents an endless regression of questions of the form "What does he want that for?"

Social practice descriptions provide this type of intelligibility and most, if not all, actions which can be understood as occurring with no further end in view are social practices. Every social group has activities which do not require justification beyond simply doing them, and societies (and groups) could no doubt be compared and contrasted by identifying the kinds of actions which are performed with no further end in view. This need not imply that everyone in the group would do these things nor would want to do them. What it does mean, however, is that what actions require explanation for a given person depend upon his knowledge of the group. As Felkner (1966) points out:

> To persons who are members with him of the same culture, his behavior is intelligible as one of the kinds of things persons in that culture do; to do such things is part of those persons' way of living....Thus, to describe a person's overt performance as being an instance of the social practice of farming is to say that farming is one of the things that persons of that culture do; and, to anyone in that culture who happens

> to know about farming, his behavior is intelligible as being that kind of practice...
>
> To speak in a reflexive manner one might describe social practice descriptions as having the, often times, useful effect of "homogenizing" the description of overt performances which might otherwise have the appearance of being very different sorts of things. A social practice description is a way of saying that these only apparently diverse performances are of the same kind. That what is the same about swilling hogs, mending fences, plowing fields, and drilling wheat is that they each are instances of the social practice of farming. To say that they are the same kind of performance is not to say that if we look closely or measure carefully we will be able to see the similarity, but only that they are the same in being parts of an intelligible whole (p. 56).

Institutional descriptions are not a different kind of description from social practice descriptions but are much broader in scope. Thus, institutional descriptions call attention to the variety of social practices which are organized into larger units (institutions) and which are characteristic of the way of life of a society. The term institution is used by Ossorio in much the same way as sociologists have employed it and thus there are a limited number of institutional descriptions available. The specific social practices involved in making a living, raising a family, etc., can be redescribed as institutions and the varieties of social practices can be seen as being "the same" in this respect.

In deliberate action, the distinction being made by the Person is not simply between what he wants distinguished from other things; in deliberate action the Person distinguishes actions (i.e., consideration of alternative actions as opposed to merely making a distinction necessary for intentional action). It is this distinction between intentional and deliberate action which permits one to speak intelligibly about lower organisms as engaging in intentional action without implying that there is no differences in their behavior from that of humans. What is distinctively human is not simply engaging in deliberate action (since often we do not), but rather the general _ability_ (a PII structural concept) to do so.

Withdrawal of commitment on the part of the describer is acknowledged in three types of behavior description which Ossorio labels as activity, performance, and course of action descriptions. As stated earlier, commitment refers here to the commitment made by the describer to the four parameters of intentional action. In _activity_ descriptions, the describer withdraws commitments from the Want and says essentially "This is what he is doing, but I do not want to (or can't) say why he should want to do this." Withholding of commitment of this sort is usually accomplished in ordinary conversation by locutions such as "It seems as though..." and "He acts as if...," although there is no locution which has a general purpose use in that it signifies that the description given is an activity description. Although we can recognize that such withdrawal of commitment can be accomplished, and that it is sometimes useful to do so, Ossorio is the only psychologist known to this author who has distinguished conceptually this type of behavior description from others that are used.

Interestingly enough, it is this type of description which receives great approval by the sciences (particularly psychology when it emphasizes the difference between a layman's description of behavior and the scientist's description). In the light of Ossorio's conceptualization of behavior descriptions, it is difficult to understand why such descriptions should be "less anthropomorphic" than other descriptions since there is commitment to the Know and Know-how parameters. Psychologists talk readily about "discrimination" (Know) and "learned responses" (Know-how and Performance) but it is the Want parameter this is apparently the biggest bugaboo in scientific description. It is easy to see why Want should provide the biggest obstacle in providing descriptions. Of all the parameters, it is the one which is most difficult to establish. The ambiguity of the Want parameter stems from two facts: 1) the same distinctions and skills could be associated with a great variety of Wants; and 2) the same Want could be present in actions involving many different distinctions and skills. Because of this ambiguity, it may be expected that observers who make commitments with respect to the Want parameter of actions will generally disagree in their descriptions substantially more than a set of observers who are noncommital in this respect. If observer agreement is taken to be the touchstone to "objectivity," then it is easy to see why activity descriptions should be regarded as more objective than action descriptions. However, objectivity achieved by this device is not to be confused with having a description of "what really happens."

As a precautionary measure to prevent misunderstanding, perhaps it should be pointed out that nothing in what has just been said should lead to the conclusion that activity descriptions as used by psychologists cannot be useful in scientific description (nor even to deny that activity descriptions might be most useful).

As activity descriptions are noncommittal relative to the Want parameter, performance descriptions are noncommittal relative to Want, Know, and Know-how. In essence, this description is one which does not distinguish between action and movement as both would have process characteristics. Although Ossorio does not claim to have found a use for this type of description, other than to express doubt as to whether what is going on is an action at all, he suggests that the Performance parameter is one which is more easily established because one can't be wrong about the Performance in the way that he can be wrong about the other parameters. In this respect, the Performance parameter is most different from the Want parameter with Know and Know-how being someplace in between (although it is probably easier to establish that a person could distinguish X from Y than it would be to establish that the action of getting X reflected a learning history).

Thus it should be noted that the practice of giving descriptions which are noncommittal relative to the parameters of intentional action is associated with more security insofar as not being wrong is concerned. However, this security is gained at the price of providing information such that the safest type of behavior description (i.e., performance description) does not even distinguish between action and movement. Paradoxically, should one routinely fail to make this distinction, he would no longer be merely cautious, but would be taking a bold and untenable position which would obliterate all the distinctions that we now make in behavior description.

Social practices are characterized as having both performance and achievement standards. That is, when one is engaging in a social practice there are standard (i.e., recognizable but not necessarily stereotyped) ways of doing what he is doing; and there are standards which are used in assessing the achievement (i.e., the achievement is intelligible and there are criteria for assessing the occurrence and quality of the achievement). It is the adherence to such standards which distinguishes social practices from courses of action (and thus the corresponding type of description). In courses of action, there are similar achievement standards but performance standards are not implied. Thus, one would engage in a course of action where there did not exist any recognized way of achieving a goal, and where the attainment of the goal required invention of new behaviors, or where there were some standard ways of achieving the goal but these were, for any reason, unavailable or objectionable. It is a course of action description that would be given, for example, of a scientist engaged in discovering new facts about the world. Teachers involved in maintaining classroom control for which there are no social practices would also be engaged in a course of action (see Chapter 3).

An apparent paradox is that one could be engaged in a course of action while engaging in recognized social practices. Consider the case of an individual who gains revenge for actions by a business competitor by supporting legislation which results in a heavy burden upon the competitor. Here it can be seen that all of the actions in which the vengeful person engages could be the type of things which any citizen might do. It is only when these actions are redescribed as a course of action (i.e., specification of the achievement desired) that it is possible to recognize that the actions have a coherence which is different from that which they have when described as social practices. In this respect course of action descriptions are similar to social practice and institutional descriptions in that a course of action provides a "point" to apparently diverse actions which they did not have before. This "point" is identified in the course of action description by the commitment to the Want parameter while being noncommittal about the other parameters.

Thus, it can be seen that the course of action description is the mirror image of the activity description.

Summary

This chapter has attempted to provide an elementary discussion of the work of Ossorio (1966a). If the attempt is not entirely successful, the failure may be due to the limited treatment given to the Descriptive Psychology which Ossorio is developing, and the difficulty in avoiding the pitfalls which our usual conceptualizations of human behavior (i.e., as psychologists) have created for us. Consequently, the reader is advised to read Ossorio's work if he wishes to have a greater understanding of the implications of the topics discussed in this chapter.

The primary focus of this chapter has been on the problems involved in the description of what we observe. The reason for the focus should be apparent from the fact that the study presented here is an observation study. Although a documented history of psychological description is not presented, it is maintained that psychological descriptions usually reflect the influence of one or the other of two major misconceptions which have been present in psychology for a long time. These are a) the influence of the "empiricist myth" which suggests that observation is simply a matter of "reading off the features" of that which is observed; and b) that we cannot observe the "Underlying processes" which are the mainsprings of human behavior. It is the latter which Ossorio identifies as the source of the "psychologist's lament" that we can never really be sure about what we say concerning human behavior.

It is Ossorio's contention that the appropriate subject matter of psychology is Persons. Persons are individuals who engage in intentional action and have a history of doing so. The person descriptions with which we are familiar are constructed by arranging series of intentional actions into different logical formats. Construction of such series is possibly due to the distinctions between actions that we are able to make on the bases of the logical parameters of the concept of intentional action. The complexity in description which this permits is not discussed in this chapter since it is a topic which is too involved for an elementary treatment.

Although an adequate behavior description requires the recognition that we observe intentional actions and not body movements, it is not necessary for every description to be an action description. Thus, Ossorio has delineated seven types of description which differ in terms of scope or the commitment made by the describer to the parameters of the intentional action paradigm. These seven types of behavior description are action, deliberate action, course of action, social practice, institution, performance and activity descriptions, all of which are discussed at some length in this chapter.

CHAPTER 3

PROBLEM AND HYPOTHESES

As stated earlier, the goal of this line of research is to develop training experiences for Education majors which will enable them to be more successful in dealing with the problems of developing and maintaining classroom control. It is not to be expected that a single research project would achieve such a goal, so this study derives its significance from being part of a larger whole. The part that it plays is one of testing the feasibility of a "rule-following" behavior description of teachers. To the extent that this type of description should make the same discrimination among teachers that an achievement description does (i.e., a classroom control description), it would seem that further research along this line would prove profitable.

On the basis of the previous chapter, it should be obvious that the approach to be used in this series of studies will be one of *explicitly* treating teachers as Persons in contrast to many of the ways that psychologists and educational researchers have treated them. In essence, what this means is that teachers are individuals who engage in intentional action, that they have a history of doing so, and that any description of teachers which is not based on the recognition of these facts is inadequate as a *behavior* description. The reader of Ossorio will of course realize that such a statement does not mean that every description must be an action description. However, it is only by means of the distinctive descriptive system which the Person concept provides that we have the complexity in description that the complex behavior of the teacher requires.

The Problem

The training of teachers in regard to classroom control presents problems because there does not now exist any social practices which can be identified as "classroom control social practices." Thus, in effect, what research projects such as this are attempting to do is to develop such social practices.

There are at least two ways in which the preceding paragraph can be misunderstood: 1) it may appear that it is being argued that teachers do not now maintain classroom control; and 2) it may appear that the preceding paragraph ignores the variety of social practices which can be identified as occurring in the classroom. In regard to 1, an argument that teachers do not now maintain classroom control would be patently false because the identification of teachers who can versus those who cannot is a relatively easy task. Consequently, at least some teachers can be described as having the ability to produce such an achievement. But there is a considerable difference between a description of the teacher in terms of achievements and a description of the teacher in terms of the behavior which makes those achievements possible. Furthermore, and more to the point, even though there are teachers who can consistently produce such achievements, it is clear that they are not engaging in actions which can be readily identified (i.e., actions which meet some performance as well as achievement standards); yet, it is by such identification that social practices are characterized. Thus, it is not surprising that a classroom observer could say "He certainly has good classroom control but I don't know how he does it." If maintaining classroom control were a question of engaging in social practices, such a statement would not be made by an observer who, as a teacher, would be familiar with those practices.

In regard to 2 above, to say that there are no social practices which can be identified as "classroom control social practices" is not to deny that there are social practices which are now identified as being relevant to classroom control. The teacher engages in many actions which are immediately intelligible to anyone who is familiar with the institution of education in our society. Thus, actions involved in the preparation and giving of lectures, assignments, examinations, etc., are the kinds of social practices which make up the institution of education. But there are also social practices such as assigning extra work, depriving pupils of something they value, scoldings, etc., which are related to the institution of education less directly. It is this latter set of social practices which are generally identified as "maintaining classroom control" or "maintaining discipline."

The argument made here, however, suggests that such an identification is misleading. It is true that such actions are intelligible and are the kinds of things that teachers do, and thus they are in fact social practices; but they are not a set of practices which are peculiar to teachers engaged in maintaining classroom control. They are social practices in that whenever anyone is exposed to behavior which is distracting, disrupting or disturbing, it is intelligible that he would seek to bring such behavior to an end. To be annoyed or irritated is to have a reason for getting rid of that which is annoying or irritating, and it is only when one is annoyed but does not seek to stop it that we ask for an explanation (e.g., "What was his stronger reason for not showing his annoyance?").

It would appear that many teachers engage in social practices such as these even though it is equally obvious that learning such social practices was not a part of their formal training. (Recall the quotation in the Introduction where teachers identified their family and extracurricular experiences as providing them with the techniques that they employed in maintaining classroom control.) For one thing, since many if not all teachers engage in them at one time or another, they cannot be the basis for the differences in the achievement of teachers in respect to classroom control. Secondly, performance standards characteristic of social practices are lacking in that such practices are not readily seen as the "kind of thing you would do" when maintaining classroom control (although they are the kinds of things you would do if annoyed or irritated).

In summary, then, the training of teachers in developing and maintaining classroom control presents problems to educators because there does not exist a body of social practices which can be identified as "classroom control social practices." The absence of performance standards characteristic of social practices makes it necessary for teachers to engage in a course of action when attempting to develop and maintain classroom control. Thus, since achievement standards characteristic of courses of action are available, it is relatively easy to tell when teachers have classroom control due to the presence of achievement standards but precludes a specification of how they are able to obtain it.

Value of Observation Study

An observation study seems a reasonable first step because it permits one the opportunity to become more familiar with the classroom situation. At the same time, it enables a test of the feasibility of a type of description which may suggest the kind of content which could be used in future teacher training courses. It should be clear, however, that it is not expected that the ultimate solution to the problem of what to teach will be found in present day classrooms. Nevertheless, the fact that some teachers are capable of maintaining classroom control suggests that descriptions of successful courses of action may facilitate the development of social practices by eliminating costly experimental efforts. The primary concern in an observational study is the type of description employed since some descriptions would have little value in progressing toward the ultimate goal of training teachers.

At this point, one should recall the discussion in Chapter 2 concerning the argument that giving descriptions is not a simple case of "reading off the features" of that being described. Since giving a description is an intentional action by an observer, it is obvious that the discriminations that an observer makes and what he knows how to do are relevant considerations in any observational study. All observational studies take this into account, of course (although their doing so is generally not described in this fashion); but many, if not most, observational studies tend to restrict the observers to descriptions which are operationally defined. In dealing with the complexity that this study is attempting to deal with, however, such a methodological technique was rejected immediately since it was obvious that all the actions of teachers relevant to classroom control would not be recognized as being such by the observers (i.e., it is the recognition and development of such actions which are the goals of the research, not the basis upon which it could now be done). Therefore it was apparent that one could not rely on the observer to read off the features of teacher behavior, and that a limited focus on particular types of action might prematurely eliminate relevant classroom control actions. Thus, the problem of description became one of having a description that the observers were competent to use, a description that would be useful as content in a teacher training course, and a description that would lead one to find, or invent, teacher behaviors that were relevant to classroom control rather than require that such behaviors be recognized as classroom control actions before the description could be applied.

The recognition that giving descriptions is an intentional action is an acknowledgment that the observers, as well as the teachers, must be treated as Persons if the full benefit of an observation study is to be derived. This is not an admission that a randomly selected person would know how to apply the descriptions to be used in the study and so it was recognized that training would be necessary. The type of training required, however, would be influenced by consideration of the observers as Persons. In essence, what this means is that the observers as Persons would already know how to treat teachers as Persons; consequently, that type of training would not be necessary.

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The observers would know how to do this because they were Persons and thus would know how to apply person descriptions and be noncommittal in the appropriate ways. The only training necessary, then, would be a familiarization with the particular set of descriptions employed.

The treatment of observers as Persons is an involved topic which deserves more space than can be allotted to it here. In order to keep this manuscript to a reasonable length, but at the risk of making apparently arbitrary pronouncements, this topic will not be discussed since it would necessitate a discussion of 1) observer agreement, 2) person descriptions as a distinctive description system which prohibits specification of criteria for their application, 3) training by means of paradigm case formulation rather than by definition (operational or otherwise), and many other complex issues. In fact, what would be required is a presentation of the Person concept with special emphasis upon Persons acting as observers and experimenters.

The Problem of Description

If the problem of classroom control is one of developing social practices where none now exist, how this is to be done during the formal training of teachers should be given some consideration. Such a concern is realistic since present social practices in teacher education need to be taken into account. It is unlikely, given the number of teacher training programs in this country, that any content which would require radical changes in the social practices now employed would meet with much acceptance. Consequently, if the existence of present methods is to act as a constraint upon improving the competence of teachers, it would appear that such competence must be developed by using essentially a "cognitive" approach. That is, as present day training programs influence intentional action by elaborating the distinctions that students can make, an approach to the problem of developing social practices of classroom control may be limited to this approach if it is to receive much acceptance. This does not mean that innovations in social practices cannot occur. It does suggest, however, that the dramatic demonstrations required for the acceptance of radical changes in social practices are not likely to be available when dealing with interactions as complex as those between teachers and pupils. Consequently, an approach compatible with current teacher training methods would seem most promising.

Curiously, the type of description that was selected for use in this study is suspiciously like the type of description which was derogated by Kounin, Gump, and Ryan (1961) as quoted in the Introduction. There, the reader will recall, those authors introduced a series of studies which they felt compelled to undertake as an antidote to the "slogans and principles" which characterized contemporary discussions of classroom control. (There is in Medley and Mitzel's [1962] argument, also quoted in the Introduction, an implicit suggestion that a description of teachers could be given by reading off the features of teachers' behaviors, but as this problem has already been discussed, no further comments will be made about it here.) It should be clear that "what teachers are doing" can be described in any number of ways, none of which is closer to reality than others (as Medley and Mitzel imply) since descriptions are intentional actions of observers, and the kinds of descriptions given reflect the knowledge, motivation and skills of those who give them. The more important point about descriptions is that some are more useful than others, and Kounin et. al. question the usefulness of such "slogans and principles."

The argument made here is that Kounin, Gump, and Ryan are correct in their derogation of such "slogans and principles" but for the wrong reasons. Slogans and principles can be useful as prescriptions if the content of such prescriptions could be used as descriptions which would in fact discriminate between teachers who vary in their classroom control achievements. As no one has even taken the trouble to submit to empirical study the content of the prescriptions which abound in modern educational philosophy, the difficulty in training teachers cannot be attributed to the use of prescriptions unless it is possible to tell which prescriptions are useful and which ones are not. The present study is concerned with this general problem of whether such content used as descriptions would enable the same discrimination between teachers that judgments about classroom control achievements produce. Positive results would indicate that future research aimed at producing prescriptions useful in maintaining classroom control would have a good chance for success.

Although it is doubtful that teachers learn during their formal training to discuss their classroom control techniques in terms of prescriptions, there is no doubt that this is what they do. In interviews with teachers, both in individual and group situations, the author was repeatedly presented with self descriptions by the teachers in terms of the prescriptions which they followed. While many teachers may not have been giving accurate descriptions of their own behavior, the fact remains that the socialization which occurs on the job also tends to take this form. That is, when new teachers discuss their classroom control problems in the presence of other teachers, the older teachers present prescriptions as solutions to the problems. Although one may not wish to defend the particular prescriptions which are offered by such teachers, due to lack of any empirical evidence that the older teachers do in fact follow such prescriptions, or that following such prescriptions is what makes the difference in classroom control achievements, the use of prescriptions is what is being noted here.

The same type of phenomenon was noted in a collection of over two hundred "critical incidents" provided by college freshmen. These students were asked to think of the teachers that were most effective and most ineffective in terms of classroom control and to provide a description of a typical incident which occurred in the classroom of these teachers in which their effectiveness or ineffectiveness was clearly demonstrated. The most notable characteristic of these descriptions was the characterization of the teachers in terms of the "principles" (policies, rules, prescriptions, etc.) that they followed in dealing with classroom tasks. (In the rest of this paper, the term "policy description" will be used in preference to other terms in order to emphasize the guiding function which such descriptions may have.)

As a consequence of such experiences, it has become clear to the author that descriptions of human behavior in terms of a "rule-following" model have been seriously overlooked, although philosophers have suggested the relevance of such a model (cf. Mischel, 1964). As a point of clarification, the use of "rule-following" here is somewhat different from the usage by Ossorio in presenting the Person concept as the "rule-following" model. The relationship between the term as it is used here and its use by Ossorio is that of part to whole because following specific rules, i.e., having a concept of appropriate behavior, is a special case of the more general phenomenon of the use of concepts by Persons.

In examining the plight of the classroom teacher for the purpose of teaching future students something that would be useful to them in the classroom, and in attempting to take into account the complexity of the interactions in which a classroom teacher engages, the use of policy descriptions seems particularly appropriate. It is obvious, for example, that no training procedure for teachers would be able to anticipate in detail the myriad of situations which the teacher might confront in the classroom. The heterogeneity of students alone makes such anticipation impossible. But it is equally obvious that detailed anticipation would not be required unless one was attempting to train teachers to engage in specific actions, the effect of which might be to develop stereotypy but doubtful effectiveness. However, as the teacher is an individual who engages in intentional action on the basis of what she Knows, Wants, and Knows How to do, it might be possible to teach recommended policies by focusing on the discriminations that following the policies would require (e.g., when it would be relevant to follow what policy).

Since maintaining classroom control requires engaging in a course of action, there are no guaranteed achievements. However, in a situation where success is problematic because one not have the skills (i.e., Know-how) to achieve a goal, and yet the goal remains as an important objective, there is no alternative but to engage in a course of action. The formulation of a set of policies (i.e., guides for action) can be regarded as an initial step that one might take where the achievement of a goal makes a course of action necessary. Policies vary in generality, however, and it is an empirical question as to the degree of specificity required if teachers are to be taught to follow selected policies in an attempt to improve their classroom control. In this respect, policy following can assimilate to either the course of action or deliberate action paradigms. To the extent that success in policy following is problematic because of a lack of Know-how insofar as following a policy is concerned, the teacher would be engaging in a course of action; if following a policy involves selection between actions, all of which the teacher knows how to do, and the selection is made on the basis of consistency with a policy, then the teacher can properly be described as engaging in deliberate action. Although it would appear obvious that deliberate action would be preferable to a course of action, the problem is not quite so simple because the repertoire of skills which teachers now possess may not be adequate for engaging in actions that are compatible with a list of recommended policies. This suggests that engaging in a course of action may be necessary because new skills could be developed while doing this, although, of course, there is no guarantee that such would be the case.

Consider the role of affection in the teacher-pupil relationship. The affectional aspect of the relationship is confusing for teachers because of the possible repercussions (from the standpoint of the teachers) on the authority aspect of the relationship. Thus, some teachers will endorse policies (although obviously they do not follow them slavishly) such as, "Don't smile until Christmas" and "Never show them that you like them" because it is necessary to gain and maintain the upper hand or "they will run all over you."

Setting aside the complexities generated by different age groups, the problem with affection (as with other aspects of the teacher-pupil relationship) is that policies, as guides to action, must have some connection to teachers' skills or they will only be empty "slogans and principles" which Education students endorse in their course work, but which have little relevance to the demands of the tasks confronting them as teachers. This connection between policies and the skills of the teachers could probably be maintained by adjusting the level of generality of the policies; however, if the teachers' skills in developing and maintaining affectional relationships are so minimal as to result in such specificity of policies that each action description amounts to a statement of the policy being followed, then a description of this as "policy following" (while not inaccurate) becomes absurd. Consequently, while recognition must be given to what teachers now know how to do, it is also the case that new skills will need to be developed; and the policies which we have determined by observation studies to be relevant to the maintenance of classroom control may provide us with an indication of the skills required.

Since it is a course of action which teachers must engage in, as there are no "classroom control social practices," the type of description (as identified by Ossorio) which seems most desirable to use in this study is the activity description. This, as the reader will recall, is a type of description where there is withholding of commitment in regard to the Want parameter of intentional action. The value of this type of description here is that it can apply to all the teachers regardless of the particular Wants involved in individual actions. Thus, behavior that a teacher now engages in which is consistent with following policy X can be described without the implication that following policy X is what the teacher Wants to do. The important point here is that she could be following policy X (i.e., following policy X could be the action in which she is engaging), and as we are interested in determining which policies are associated with greater achievements in classroom control, this is the kind of information required.

In using these descriptions as activity descriptions, it may be possible to note that the same actions of the teacher are relevant to different achievements (and also policies). Thus, as has been recognized by teachers themselves, the practices associated with preparation and presentation of teaching content are also relevant to the achievements of the teachers in terms of classroom control.

The activity description will enable us to organize actions into many different series in addition to those which are now apparent to teachers. Thus, it may be that the relevant dimensions of classroom control can be adequately described with a relatively limited list of policies, and that what could be important in the teaching of classroom control may be just that fact.

In summation of this section, there are several points which should be identified: 1) present social practices of training teachers should act as a constraint upon the type of description employed in an observation study; 2) the problem of "slogans and principles" in training of teachers stems from the lack of empirical evidence, and not from an intrinsic inadequacy of prescriptions; 3) the training of teachers to follow prescribed policies can only be done by the recognition of present teacher skills as a reality constraint which will influence the level of generality of the policy descriptions; 4) the use of an activity description to describe teachers will enable a categorization of actions (i.e., behavior) that will facilitate the recognition of the dimensions of classroom control.

Validation of the Measuring Instruments

Psychology can be criticized for the "conceptual confusion" that has often resulted in the testing of non-empirical relationships; that is, the logical connections that exist among the concepts we employ are often "discovered" by empirical workers who have failed to examine such conceptual linkages before engaging in empirical work. To the author's knowledge, no one has suggested that such conceptual linkages could be used in empirical work to provide a type of validation for the measuring instruments employed. In essence, this is the situation that exists for Hypotheses 2 and 3. For example, as mentioned later in the rationale for Hypothesis 3, the *concept* of ability entails that similar achievements will result from situations permitting the exercise of an ability. To the extent that such was not the case, we could withdraw the claim that a person had the ability to do such and such; or as an alternative option, we could seek a special explanation as to why the achievement did not occur. Thus, if classroom control is an *ability* which teachers have, it would be exhibited in the achievements across similar situations (i.e., classes). To hypothesize that such similar achievements will be found is to make a non-empirical (i.e., conceptual) statement. Thus if a teacher has a high classroom control achievement in one class, and low achievement for all other classes, we would probably reject an ability description and perhaps look at student characteristics as a possible explanation of the high achievement in the one class, unless there was some question about the basis for assessing the achievements involved. If we had reason to believe that our assessment of achievements could be inadequate, we would withhold commitment by not providing ability descriptions until we had established that our assessment of achievements was adequate. Since the creation of a measuring instrument gives a reason for questioning its adequacy, a variety of procedures have been established for "validating" measuring instruments. The approach used here is somewhat different but it is as logically sound (if not more so) than others which have been employed. This approach consists of examining the measurements provided against a background of logical implication. Therefore, since it is widely accepted that classroom control is an ability of teachers (i.e., there are similar achievements across classes which distinguish some teachers from others), failure to confirm this hypothesis would indicate that other measures of classroom control should be employed.

The argument for the use of conceptual linkages as a basis for an approach to validation of the measurement of classroom control is similar to the argument that underlies Hypothesis 2. In this case, however, it is not a concern with validation that prompts the use of a non-empirical maxim. Rather it is the attempt to gain assurance that relevant policies can be constructed. (While this might be called "validation of the policies," it would not be strictly correct to do so.) The non-empirical maxim which suggested Hypothesis 2 was, "If you know what you're doing, you're going to do it better than if you don't know what you're doing." Perhaps the following translation of the maxim will indicate its non-empirical nature more clearly: If you can make all of the relevant distinctions, including distinctions concerning what actions are relevant to achieving a goal, then your success in achieving a goal will be greater than if you cannot distinguish when it is necessary to engage in what actions.

If someone should not be convinced about the non-empirical nature of this maxim by the translation provided, and regards the maxim as a statement subject to empirical test, perhaps he might become convinced by attempting to indicate what would count as evidence which could lead to the rejection of the maxim.

Perhaps it should be emphasized that the use of this maxim does not make the hypothesis non-empirical. Hypothesis 2 is subject to an empirical test but the results of such a test would not bear upon the non-empirical point just discussed. The results would have significance in considering other features of the study, but neither positive nor negative results could lead to the acceptance or rejection of the non-empirical point.

Given the validation of the classroom control instrument, failure to confirm Hypothesis 2 would be due to three possibilities: 1) the policy descriptions were not relevant to the quality of classroom; 2) the observers were incompetent and could not describe the teachers in terms of the policy descriptions; 3) the non-empirical maxim which suggested the hypothesis does not distinguish between

"Know of" and "Know that" (cf. Ossorio, 1966a). That is, although the teachers behave in ways which suggest the distinctions required by the policy descriptions (i.e., Know of), they are not capable of articulating the distinctions made (i.e., Know that). In this case, "Know that" becomes one of recognizing their behavior under the descriptions provided to them. If any of these possibilities occurred to a substantial degree, there would be no basis for expecting differential correlations with the observers by the two groups.

On the other hand, confirmation of Hypothesis 2 would be evidence that these three possibilities did not occur; or if they did, their influence would not be sufficient to obscure the expected finding based on the non-empirical maxim. While failure to confirm the hypothesis would not pinpoint the nature of the problem, confirmation could not be obtained if any of these three possibilities occurred to any great extent.

Hypotheses

As the study presented here was not derived from previous theoretical or empirical work, including that of Ossorio, the hypotheses being tested bear the imprint of practical importance which characterizes the topic itself. That is, the hypotheses are of the "If I want to do that sort of thing, I have to be able to do this first" kind. Thus, in order to achieve some future goal of training teachers along policy lines, one needs some assurance that he can develop policies which will discriminate between groups which are different in terms of their abilities to achieve classroom control. In addition, they should be the kinds of descriptions under which the teachers who do have the greater abilities would be able to recognize their own behavior. In this sense, the hypotheses being tested are the kinds of considerations that any complex course of action requires. While it is impossible to specify the details of future teacher training procedures, it is possible to specify what must now be the case if the "rule-following" approach is to be pursued. The hypotheses, presented below with brief rationales, are statements of conditions which should be confirmed if this type of approach holds any promise.

1. TWO GROUPS OF TEACHERS FORMED BY A MEDIAN SPLIT OF 16 TEACHERS ON THE BASIS OF THEIR CLASSROOM CONTROL ACHIEVEMENTS (AS JUDGED BY CLASSROOM OBSERVERS AND PUPILS) IN TWO CLASSES (I.E., BEST AND WORST CLASSES AS IDENTIFIED BY THE TEACHERS) WILL DIFFER SIGNIFICANTLY IN THE APPROPRIATENESS OF A SET OF POLICY DESCRIPTIONS AS JUDGED BY CLASSROOM OBSERVERS.

If training of teachers can be done along "policy-following" lines, it must be possible to differentiate effective from ineffective teachers by means of policy descriptions. This is particularly crucial if present teacher behavior is to be used as a basis for selection of the policies to be taught. This means that such training is dependent upon policy following as a type of description. Confirmation of this hypothesis would be evidence that this type of description can be profitably used in the realm of the complex teacher behavior identified as classroom control.

2. A GROUP OF TEACHERS JUDGED TO HAVE GREATER CLASSROOM CONTROL WILL PROVIDE SELF DESCRIPTIONS THAT WILL BE IN GREATER AGREEMENT WITH THE DESCRIPTIONS PROVIDED BY OBSERVERS THAN WILL BE THE CASE FOR TEACHERS HAVING LESSER CLASSROOM CONTROL.

This hypothesis becomes a test of the relevance of the particular policy descriptions used in the study because failure to confirm this hypothesis would not invalidate the non-empirical point discussed earlier, but would be evidence that the policy descriptions used were not adequate for describing relevant actions to classroom control.

3. THE MEAN CLASSROOM CONTROL ACHIEVEMENT RATING WILL BE HIGHER IN BOTH CLASSES (I.E., BEST AND WORST) FOR THAT GROUP OF TEACHERS HAVING THE HIGHER TOTAL RATING.

If maintaining classroom control reflects an ability of teachers, then the concept of ability entails that situations permitting the exercise of the same abilities will result in similar achievements. This hypothesis is a test of the adequacy of the classroom control measuring instrument.

4. DESCRIPTIONS OF TEACHERS IN TERMS OF THE POLICIES THEY

FOLLOW IN MAINTAINING CLASSROOM CONTROL WILL RESULT IN AN INTRA-OBSERVER DAILY AGREEMENT WHICH WILL STABILIZE IN LESS THAN 10 HOURS OF OBSERVATION.

If present teacher behavior is to be used as a source of policies to be taught to future teachers, a great number of teachers will have to be observed. Practical problems involved in obtaining funding would tend to eliminate approaches that would require more than 10 hours of observation per teacher before stable descriptions were achieved.

Summary

The difficulty which confronts teachers in developing and maintaining classroom control is that there are no social practices which can be identified as "classroom control social practices." The purpose of this and subsequent research projects is to develop such social practices by providing training to Education majors which is based, in part, on the identification of effective courses of action which some teachers have already developed. The study reported here is concerned with the description of the courses of action used by successful teachers.

Since the type of description employed is of primary concern in proceeding toward the goal of training teachers, it has been argued in this chapter that a "rule-following" description has the following advantages: a) No radical changes in present teacher training practices would be required because it is a type of description that is now employed by educators, teachers and students; b) it is a type of description which any person used as an observer would already know how to use; c) it is a type of description that requires one to treat teachers (and observers) as Persons because only individuals who can engage in intentional and deliberate action can be described (or describe others) as following rules (i.e., Persons provide the paradigm case of rule-following); d) it is a type of description which can be varied in generality in order to maintain a connection between the rules to be followed and the abilities of students learning how to teach; and e) it is a type of description which can be used by observers without the necessity of commitment to the Want parameter of the intentional action paradigm. This permits the categorization of teacher actions into a limited number of categories.

An innovation in validation of measuring instruments which consists of the use of non-empirical maxims or conceptual linkages is presented. Since there has been considerable criticism of the conceptual confusion which exists in psychology, the reader should be careful to note that the tests of the hypotheses are not tests of the non-empirical points.

CHAPTER 4

METHOD

In overview, four observers were assigned four teachers each and observed the Best and Worst class (as identified by the teachers) of each teacher daily for an entire class period for five to ten days (except in cases of teacher absenteeism). On each day the observers completed the Observation Report (Appendix B). At the end of each five day period, they ranked the policy descriptions contained in the Observation Report as to their appropriateness for each teacher. At the completion of the project, each observer indicated the appropriateness of the policy descriptions on a 200mm rating scale (sample presented in Appendix E) for their four teachers in the eight classes observed. In order to obtain a measure of classroom control which was independent of the observers assigned to the teacher (i.e., the Permanent observer), each observer visited all of the other classes (except in the few cases of time conflicts) and the composite rating from these Visiting observers was used as the basis for determining the Classroom Control score (i.e., CC score) assigned to each teacher. A median split of this CC distribution formed a High and Low CC grouping for testing hypotheses about the relationship between the policy descriptions and classroom control.

Selection of a School

In the Washoe County School District, there are seven public junior high schools. While the primary basis for selection was the practical one of finding a school that would cooperate, the school employed has been described by Dr. Robert Whittemore as having a fairly heterogeneous social class structure and one which is probably typical of junior high schools across the country. This was the third school that was approached as the first two schools declined participation. Each school was approached in a different manner, the first involving only a consultation with the principal, the second involving letters to the teachers with only three teachers agreeing to participate, and the third involving a group meeting of the teachers with the principal, Dr. Whittemore, and this investigator in attendance where the project was explained and support requested. As many of the teachers were familiar with Dr. Whittemore from courses taken from him at the University of Nevada, his support of the project was undoubtedly the major factor in gaining the cooperation of the teachers. The sixteen teachers who participated in the study comprised the entire teaching staff with the exception of those teachers involved mainly in counseling or such non-academic courses as physical education, home economics, and shop.

Selection of Classes

At the meeting with the teachers, they were asked to identify their Best and Worst classes in terms of classroom control. It was explained to the teachers that the term "classroom control" was being used in the broadest sense and referred not only to the rate or type of discipline problems that existed, but to the total relationship between the teacher and pupils. Thus, the Best class would likely be the one that they enjoyed most and were most effective in (in terms of accomplishing teaching goals), while the Worst class would be the one which provided a great deal of strain and seemingly required great expenditures of effort with few rewards. It was felt that anyone who had ever taught would understand such descriptions, and there was no evidence that the teachers had any difficulty in identifying the classes which fit these descriptions.

Selection of the Observers

The observers used in this study were four women who were on the substitute teacher list of the Washoe County School District. It was originally intended to use graduate students in Education as observers but the attempt to obtain such students was unsuccessful. Three of the observers used were certified for elementary school teaching only and one of the observers was certified for teaching in the junior high school. The basis for selection was simply the practical one of accepting the first four substitute teachers who were able to be contacted and who agreed to participate in the project. On the first day of training, one of the observers was offered a full time teaching position and was replaced by another substitute teacher suggested by one of the remaining observers.

Observation Schedule

The original schedule of observations called for ten consecutive days of observation in the classes identified by the teachers as being Best or Worst (although not during the same 10 day period). It was hypothesized, however, that the observers would develop a stable description of the teachers prior to the completion of the ten hours of observation. This was found to be the case and is reported in the Results section. As a consequence, the period of observation was shortened to five hours after the first four weeks of the study.

In maintaining the best daily (two hours each day) schedule possible for the observers during the entire study, the usual situation was that the observations of a teacher's two classes were not consecutive but rather were spaced by the observation of other classes. The prime consideration in scheduling was the convenience of the observers but with one exception, the Best and Worst classes were counterbalanced to reduce systematic biases that might have arisen from always observing a particular type of class first for the four teachers to be observed. It might have been possible to compress the length of time spent in data collection (eight weeks) by increasing the number of observations made daily, but only two hours of observation per day were scheduled in order to ensure that the observers would not become bored.

Training of the Observers

The training of the observers was continuous throughout the project but it can be discussed as occurring in two phases. Prior to the project the observers were given 32 hours of training, most of the time being spent in discussing the concept of classroom control and the policy descriptions that were to be used in the study. In addition, nine hours were spent in classroom observations to identify the kinds of problems which might arise. In a sense, this period was used as a pilot study as modifications of the list of descriptions and the technique for recording judgments mentioned later developed from this pre-project training period.

Unfortunately, the observational experience provided during this period was limited by the practical problem of obtaining teachers in the training school who would participate in such a program, and only five teachers were available to the observers during this period. Fortunately, there was considerable diversity among these teachers in terms of the relationships that they had with their classes so that the experience was not as limited as it might otherwise have been with such a small sample.

During the observations made during this period, two observers at a time were present in the classrooms. The training during the discussion periods followed the type of considerations presented in the Observer's Training Manual (Appendix A). The main concern was to develop awareness of the complexity of the concept of classroom control and the relationships of the policy descriptions to this concept. It was emphasized that the primary goal of the discussions was not to achieve some arbitrary standard of agreement among the observers, but to develop an understanding of the policy descriptions in terms of paradigm and borderline applications.

During the study, the observers met with the investigator every week for 2 or 3 hours and some training was given, but most of this time was spent in additional data collection. It was at these meetings that the ranking of the descriptions occurred. Some time was spent, however, in going over those descriptions which seemed to be providing difficulty.

Final Selection of Policy Descriptions

In the pre-project training period, there were forty-six policy descriptions used to provide a description of the teachers (see Appendix F, Selection of Policy and Class Descriptions). In judging the relevance of these descriptions to the teachers observed, the observers were provided with three options: "Appropriate," "Not appropriate," and "Not relevant." The latter category was to be used where nothing was observed that would count as an opportunity for following a policy. The observers reported their judgments on a seven point scale which was a combined appropriateness and confidence rating. The seven points on the scale were marked as follows:

1) Very confident that teacher is not following this policy.
2) Confident that teacher is not following this policy.
3) Slightly confident that teacher is not following this policy.
4) Not sure if teacher is following this policy.
5) Slightly confident that teacher is following this policy.
6) Confident that teacher is following this policy.
7) Very confident that teacher is following this policy.

On the basis of the discussions with the observers and other considerations given below, two major changes were made before starting the actual project. These changes were as follows: 1) It was decided to separate the confidence ratings from the appropriateness rating to emphasize the two judgments involved; 2) The list of descriptions was reduced primarily because the amount of time required for completing the list at the end of each class hour consumed too much observation time, but also because the observers did not seem able to work with so many descriptions at one time. In addition, (or perhaps as a consequence) some descriptions consistently were given a "Not relevant" rating during the training sessions. Although the extensive observation time permitted in the study might have provided the observers with enough time to examine the relevance of these descriptions, it was decided that a reduction of the number of descriptions and the elimination of the "Not relevant" category would be more likely to force the observers to consider the borderline as well as the paradigmatic cases of following the policies presented.

Several criteria were employed in the reduction of the list of descriptions. As already suggested, those descriptions consistently receiving a "not relevant" were dropped. As the CC rating (i.e., the sum of the first eight classroom descriptions) varied for the five teachers used in the training sessions, those descriptions which seemed to permit greater agreement among the observers were retained in preference to others although the other criteria were given more weight in these judgments. Thus, for example, a description which all observers agreed was "Not relevant" was still dropped despite the consistent agreement. In some cases, several descriptions were simply combined into a new description despite the above criteria in order to have a description available for the different types of situations that could occur in the classroom.

As a consequence of the above reduction, there remained 24 policy descriptions and the original 10 classroom descriptions. This form is presented in Appendix B as the Observation Report used in the study.

Types of Data Collected

The final list of policy descriptions provided three types of data which will be identified in later discussions by the following labels: 1) Dichotomous--This refers to the daily Appropriate/Inappropriate judgments recorded on the Observation Report. In the daily observations, the observers simply recorded whether the description provided was appropriate or inappropriate for the teacher and the degree of confidence (on a 5 point scale) that they had in that judgment. These judgments were cumulative (i.e., based on previous observations as well as those made on the particular day being recorded) such that the last Observation Report completed represented the best description that the observers could give of the teachers (within the limits of the descriptions provided); 2) Rank--These data were collected at the end of each week's observations and consisted of ranking (by sorting 3 x 5 cards) the descriptions within the teachers observed from the most appropriate to the least appropriate (or most inappropriate). No ties were permitted in this ranking in order to force the observers to make as fine a discrimination as possible even if it appeared to be random; 3) Measurement--These data were collected at the end of the eight week observation period and were provided by the observers for each of their permanent teachers. The form employed is illustrated in Appendix E and consisted of a vertical 200mm line divided into two equal portions with the end points labelled "Extremely Appropriate" and "Extremely Inappropriate." Since, in some cases, there was at least six weeks since the observers had been in some of the classes, they were instructed that they could record a single mark for both classes in the event that they could not make a discrimination between them, either on the basis of having forgotten such a discrimination or never able to make such a discrimination.

Classroom Descriptions

These rating scales were included in the Observation Report and were completed daily by the observers but these daily reports differed from those given for the policy descriptions in that they were situation-specific (i.e., they were not cumulative judgments but reflected the class behavior on each day being observed). Although ten scales are included among this set, only the first eight were used in testing hypotheses about the relationships between the teacher descriptions and the classroom settings. The last two were included in this study only for the purpose of identifying the relevance of a stylistic variable (confidence of teachers) and the possibility of using a global judgment to replace the other descriptions in future research.

The classroom description scales were also completed by the pupils in the classes at the end of the observation period. This was done in order to have a basis for identifying teacher groupings which would be independent of the observers. As with the observer data, only the first eight scales were to be used in grouping of the teachers. Since some teachers had expressed concern about the form which the pupils were to complete, they were given the form for inspection and asked to complete it as they thought the "average" student in the class would respond.

At the time of collection of the pupil data, the teachers provided a self description in terms of the policy descriptions on the Measurement data form described above.

CHAPTER 5

RESULTS

Since the hypotheses involve a median split of the sixteen teachers used in the study on the basis of classroom control achievements, an examination of the results of the technique used for such a division would seem to be of primary importance. The data for this division are presented in Table 1 which includes the classroom control ratings (i.e., CC ratings) given by the Visiting observers, pupils, and the Permanent observers. Although the correlation between the Visiting observers and the pupils is only .64, it can be seen from the rankings provided in Table 1 that insofar as the grouping of teachers is concerned, there is only minor disagreement. Consequently, the data analyses involving the median split were based on the Visiting observer grouping, and no secondary analyses involving pupil ratings seemed required.

The product moment correlation between the Visiting observers and the Permanent observers for the classroom control ratings was .87. Insofar as the median split of the teachers is concerned, the rankings in Table 1 also show that it is only one teacher who would be included in the High CC group for the Permanent observers that was not included for the Visiting observers. The rankings show that the pupils and the Permanent observers agree in including Teacher 3 within the first eight ranks (although the

Table 1

Mean Ratings for High and Low Classroom Control Groups

	Teacher	Visiting Observer	Pupils	Permanent Observer
High CC	13	12.9 (1)	11.0 (4).	14.0 (1)
	4	12.4 (2)	11.8 (2)	13.2 (2)
	5	12.3 (3)	10.9 (5)	13.2 (7)
	6	11.9 (4.5)	10.5 (6)	11.0 (8)
	15	11.9 (4.5)	11.1 (3)	12.1 (5)
	9	11.8 (6)	12.2 (1)	13.1 (3)
	12	11.6 (7)	10.3 (7)	12.0 (6)
	1	11.5 (8.5)	9.3 (12)	10.7 (9)
Low CC	7	11.5 (8.5)	9.7 (9.5)	10.6 (10)
	3	10.9 (10)	9.9 (8)	12.5 (4)
	2	10.4 (11)	6.7 (16)	10.3 (12)
	8	9.9 (12)	7.9 (14)	10.5 (11)
	14	8.0 (13)	8.7 (13)	9.4 (13)
	11	7.6 (14)	9.6 (11)	7.9 (15)
	16	7.2 (15)	9.7 (9.5)	8.5 (14)
	10	6.8 (16)	7.2 (15)	6.5 (16)

Note.- Rank order is presented in parentheses to facilitate comparisons.

product moment correlation between the pupils and the Permanent observers is similar to that between the pupils and Visiting observers with r equal to .64). The agreement of junior high school students with trained observers could be regarded as providing some evidence that the classroom control measurement scales required judgments that were relatively easy to make.

Table 2 presents the policy descriptions as functions of group (i.e., High and Low CC) membership and type of data. As will be recalled, the three types of data identified here as Measurement, Rank, and Dichotomous, were collected at different times during the study. The Measurement data were collected at the completion of all observations; the Rank data were collected on the weekend following each week's observations; and the Dichotomous data were collected daily but since these judgments were to reflect the influence of observations made on the preceding days, only the data from the final day of observation are presented. Thus, the Dichotomous data are regarded as the best description of the teachers that could be given within the limitations of the list of descriptions and the type of judgment required. It is only by using the data from the last day of observation that the Dichotomous data can be regarded as comparable (in the sense of being the best description possible) to the Measurement and Rank data.

Since there are three types of data presented, the

Table 2

Mean Scores on Policy Descriptions for
High and Low Classroom Control Teachers

	Policies	Measurement[a]		Rank[b]		Dichotomous[c]	
		High	Low	High	Low	High	Low
14	Require immediate compliance	86	-7	7	14	8	3
10	Respond immediately to disorder	59	-25	9	16	7	2
7	Treat distractions as serious	73	-2	8	13	8	2
3	Allow incomplete work	-63	10	23	11	0	4
4	Talk down to students	-59	10	19	15	1	2
18	Show anger and frustration feelings	-52	10	18	12	2	4
22	Use group as punitive agent	-48	11	17	11	4	4
15	Use humor in difficult situations	54	-3	8	12	7	6
13	Require strict compliance with rules	72	16	11	9	8	8
1	Ensure understanding of task	64	10	6	11	8	4
8	Take pains to appear fair	56	15	10	11	7	5
9	Closely supervise facilities	50	-1	12	15	6	3
5	Relate tasks to students' interests	31	-18	13	16	5	3
6	Permit initiative and imagination	24	-20	10	16	6	2
16	Use sarcasm and belittling	-18	26	13	10	6	4
21	Encourage individual competition	64	26	9	12	7	4
17	Be punitive	-67	-34	20	19	1	2
19	Use threats sparingly	44	13	11	9	8	7
2	Talk above students' heads	37	9	11	11	6	4

20	Use mainly simple desist	58	35	10	5	7	8
11	Express affection freely	28	13	9	12	7	6
12	Permit expression of feelings	1	-14	13	13	4	4
23	Develop group solidarity	8	-4	14	12	4	4
24	Understand disturbances immediately	-20	26	18	16	2	2

Note.- Data are means rounded to whole numbers and based on Best and Worst classes combined. Policies are arbitrarily ordered on the basis of the magnitude of mean differences

a. Potential range is from plus 100 millimeters (appropriate) to minus 100 millimeters (inappropriate).

b. Potential range is from 1 (most appropriate) to 24 (least appropriate or most inappropriate).

c. Potential range is from 8 (always appropriate) to 0 (never appropriate).

question is raised as to the extent of agreement among them. The only statistic which permits a simultaneous comparison for the different types of data is the Coefficient of Concordance. By simply ranking the entries in Table 2 for the two groups, Coefficients of Concordance were computed. For the High classroom control group, the agreement in the data yielded a W of .92. For the Low CC group, the agreement yielded a W of .86.

Since W is a relatively unfamiliar statistic, the following data are included to provide some perspective. The W required for significance at the .05 level is .51. Additional perspective is gained from examination of the average rho among the three possible comparisons for each W. For the High CC group, the average rho was .88; for the Low CC group, the average rho was .78.

Figure 1 is a graphic presentation of the Measurement data presented in Table 2. The advantage of this type of presentation is that it shows quite clearly that the descriptions of the High and Low classroom control groups are qualitatively different. The filled bars, representing the Low CC group, are relatively close to the 0 line while the open bars, representing the High CC group, extend a considerable distance from the 0 line. This indicates that the observers had difficulty in making judgments about what the Low CC teachers were doing since none of the descriptions provided could be judged as being clearly appropriate or inappropriate. For the High CC teachers,

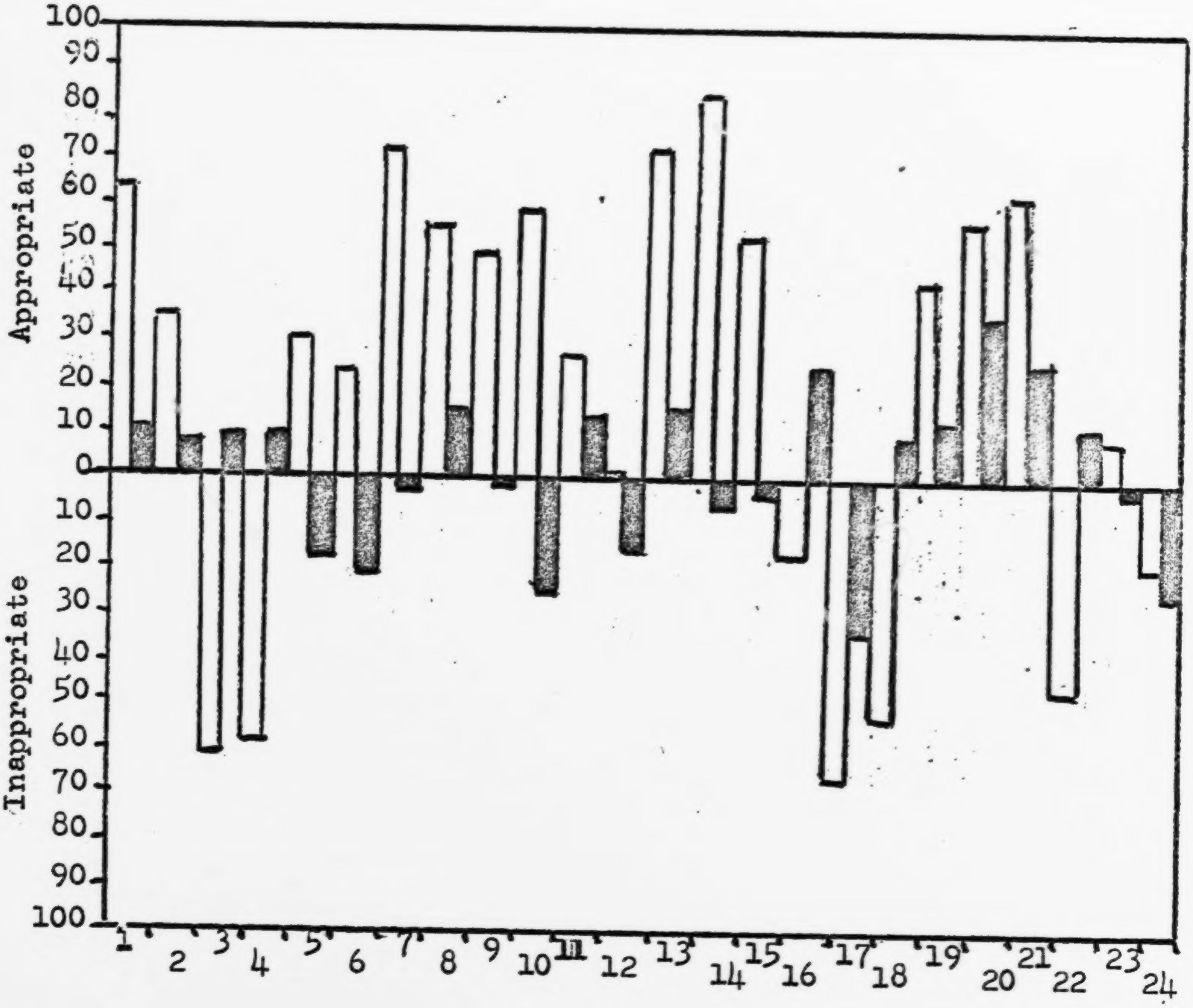

Fig.1. Mean ratings on policy descriptions for High and Low classroom control groups. (Filled bar is Low CC group.)

on the other hand, the observers could judge that the descriptions were more clearly appropriate or inappropriate.

Figure 1 should not be interpreted as suggesting that the policy descriptions were irrelevant to the Low CC group. While it might be the case that Low CC teachers follow policies that are different from those followed by High classroom control teachers, the decision about the relevance of a list of policy descriptions must be made on some basis other than the difficulty in applying the descriptions. A basis that might be used, for example, is whether actions relevant to the policies could reasonably occur in the classroom. To the extent that there were no possibilities for engaging in actions which could be regarded as relevant to a policy description, then that policy description would be characterized as irrelevant. Thus, one basis for assessing the relevance of a policy is the consideration of the frequency of opportunities for following that policy. It was this consideration which explains the concern with paradigm and borderline cases of policy following during the training of the observers and discussed more fully in the Observer's Training Manual (see Appendix A).

Prior to performing an analysis of variance on the Permanent observer Measurement data, it was necessary to reflect policy descriptions 3, 4, 16, 17, 18 and 22, so that a low rating would in all cases represent high control. In order to have only positive numbers, the scales were measured to the nearest millimeter from the Extremely Appropriate end of the scale (see sample scale in Appendix E). In order to have an independent criterion for this reflection, so that it would not involve a simple maximizing of random variation, the descriptions of the Ideal teacher given by the observers were used as a check on the reflection. For policy descriptions 3, 4 and 17, all four of the observers regarded the policies as inappropriate for the Ideal teacher; for policy descriptions 16, 18 and 22, three of the four observers agreed that the policy was inappropriate for the Ideal teacher. Consequently, since the wording of the policy descriptions was arbitrary in this respect, it is assumed that the reflection of these descriptions was legitimate.

The analysis of variance ignores differences between observers since the design of the study confounded teacher and observer differences. This confounding was a by-product of the decision to have as much observation time as possible, and thus there was no overlap between the observers (except when acting as Visiting observers). Each observer was assigned four permanent teachers with eight permanent classes; however, all four of the observers are represented in each of the two classroom control groups.

As shown in Table 3, the only significant F's obtained were those for the hypothesized group differences and the policy descriptions. The group main effects confirm the hypothesis that rule-following descriptions enable a

Table 3

Analysis of Variance for Measurement Data
Provided by Permanent Observers

Source	df	MS	F
Groups	1	413,479.71	10.786 **
Classes	1	1,446.33	.146
Policies	23	11,122.36	2.824 **
Teachers w. Groups	14	38,333.18	
Group x Class	1	4,293.29	.435
Group x Policy	23	4,331.53	1.099
Class x Policy	23	1,050.59	1.115
Teachers w. Group x Class	14	9,868.53	
Teachers w. Group x Policies	322	3,938.78	
Groups x Class x Policies	23	1,154.54	1.226
Teachers w. Group x Class x Policies	322	942.03	

Note.- Teachers are used as a random factor.

** P less than .01

discrimination between teachers who differ in the quality of classroom control achievements. The differences in policies indicate that the policy descriptions employed are measures of different teacher behaviors, but since the interaction between the groups and policies was not significant, no statistical examination of the discriminating power of the individual policies can be undertaken without the risk of emphasizing chance variations. Although it is impossible to interpret the lack of a significant interaction, it is possible to explain what such a lack means by reference to Figure 2, which is a graphic presentation of the Measurement data presented in Table 2. In Figure 2, the policy descriptions have been ordered on the basis of the magnitude of the mean differences between the two groups. Thus, the curve in Figure 2 depicts the difference between the groups for each of the policy descriptions. Since the mean difference of 47 mm. is significant (i.e., the group main effect), the lack of a significant group by policy interaction means that random variation accounts for the difference between the curve and the horizontal line representing the overall mean difference.

Thus, although the group main effect provides a confirmation of the first hypothesis, the argument that observational studies using the content of prescriptions as descriptions will permit identification of useful prescriptions is not supported. The effect of the lack of a significant interaction between the group and policies will

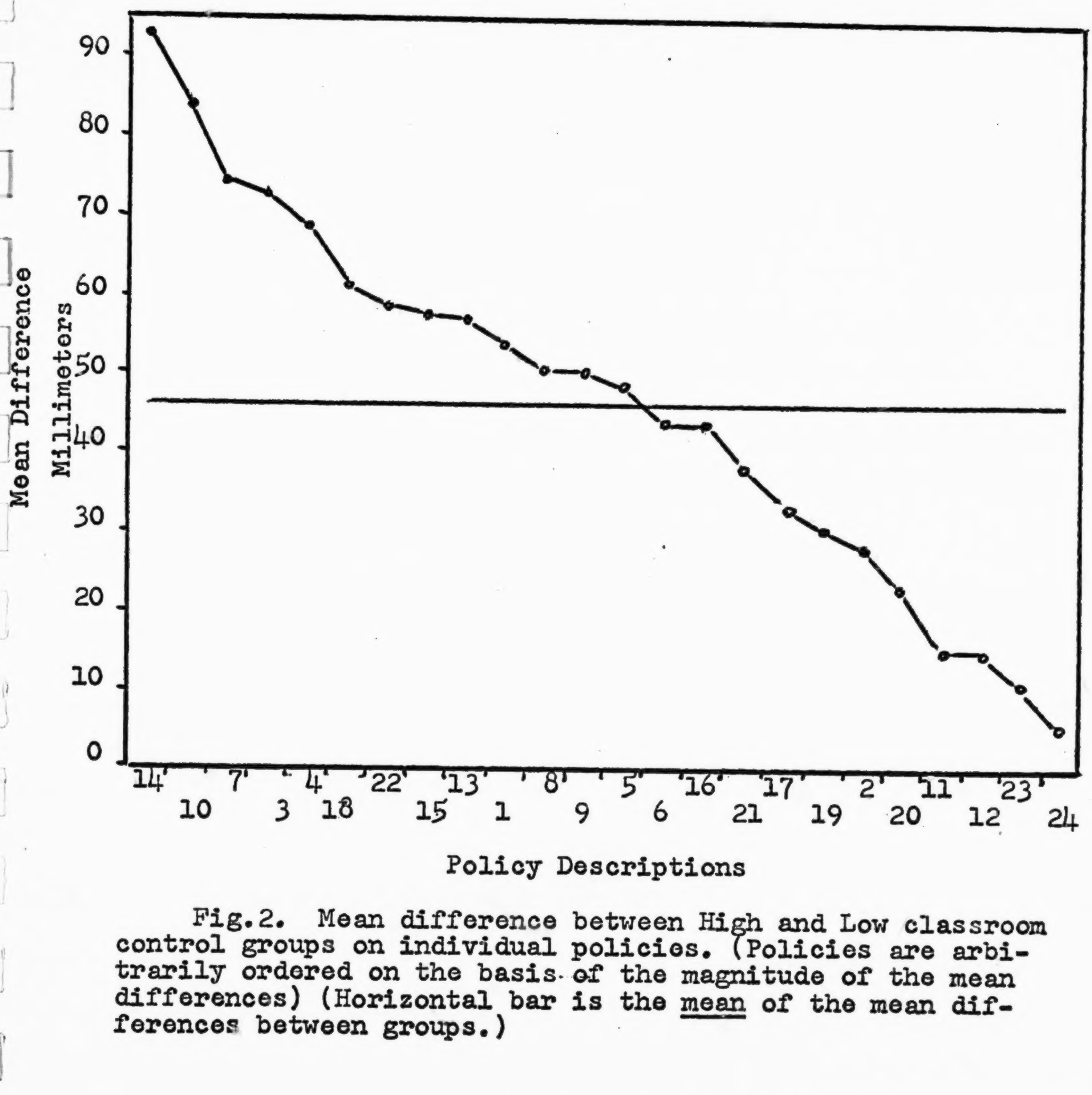

Fig. 2. Mean difference between High and Low classroom control groups on individual policies. (Policies are arbitrarily ordered on the basis ~~of~~ the magnitude of the mean differences) (Horizontal bar is the mean of the mean differences between groups.)

be examined in Chapter 6.

The lack of significant differences between classes, and lack of significant interactions involving classes, cannot be interpreted beyond simply recognizing that these findings are compatible with arguments made previously regarding the capabilities of the observers to apply rule-following descriptions.

The Rank data also discriminated between the High and Low classroom control groups. A t computed on the difference between means of the sums of ranks assigned to the policy descriptions for each group was 4.38 (P less than .001). A similar finding was obtained for the Dichotomous data by computing a Mann-Whitney U for the number of appropriate judgments assigned to the 24 descriptions for the two groups. Since the N for this comparison was 48, the normal curve was used for testing the significance of the U obtained (z equal 3.56; P less than .001). Both of these tests involved reflection of the policies on the basis of the Measurement data mentioned above.

Hypothesis 1, then can be regarded as receiving considerable support, since the three types of data collected at different times during the study are consistent in showing that the descriptions discriminated between the teachers who were previously grouped on the basis of their classroom control achievements.

Table 4 presents the data used for testing the hypothesis concerning the extent to which agreement between the

Table 4

Agreement on Teacher Descriptions Between Teachers and Permanent Observers

	Teacher	Class	
		Best	Worst
High CC	13	.84	.63
	4	.46	.50
	5	.12	.29
	6	.39	.45
	15	.62	.61
	9	.63	.51
	12	.38	.49
	1	.32	.21
	Mean	.51	.47
Low CC	7	.15	-.12
	3	.32	.41
	2	.10	.10
	8	.20	.17
	14	-.10	-.16
	11	-.21	-.53
	16	-.36	-.26
	10	-.16	-.41
	Mean	-.01	-.11

Note.- Entries are product moment correlations of measurement data.

self-descriptions provided by the teachers and the observer descriptions of the teachers would vary with classroom control. As mentioned previously, the teachers provided a self description on the Measurement scales for each class observed. The entries in Table 4 are the correlations between these self descriptions and the descriptions provided by the Permanent observers. Each correlation is based on an N of 24. A transformation of these correlations into Fisher z's enabled a test of the difference between the means of the z's for each of the classes observed. The difference between the mean correlations of .51 and -.01 for the Best class yielded a z of 5.19 (P less than .00001). The difference between the mean correlations of .47 and -.11 for the Worst class yielded a z of 5.63 (P less than .00001). Since this hypothesis was based on the non-empirical maxim "If you know what you're doing, you're going to do it better than if you don't know what you're doing," it should be remembered that these mean differences do not provide a test of that maxim but rather substantiate the claim for relevance of the policy descriptions.

Table 5 presents the data for Hypothesis 3 which concerns the test of the adequacy of the classroom control descriptions employed. It is necessary to recall that a test of this hypothesis is not a test to "discover" if classroom control is an ability of teachers. It is taken for granted that classroom control is an ability and so this hypothesis involves a test of the adequacy of the

Table 5

Classroom Control Ratings of Visiting Observers for High and Low Classroom Control Groups

	Teacher	Total	Class	
			Best	Worst
High CC	13	12.9	6.5	6.4
	4	12.4	6.2	6.2
	5	12.3	6.2	6.1
	6	11.9	6.1	5.8
	15	11.9	6.1	5.8
	9	11.8	6.8	5.0
	12	11.6	5.8	5.8
	1	11.5	5.3	6.2
	Mean	12.04	6.09	5.95
Low CC	7	11.5	5.7	5.8
	3	10.9	5.8	5.1
	2	10.4	5.5	4.9
	8	9.9	5.4	4.5
	14	8.0	3.4	4.6
	11	7.6	4.7	2.9
	16	7.2	4.1	3.1
	10	6.8	4.8	2.0
	Mean	9.04	4.92	4.11

measuring instrument employed to assess achievements. From an inspection of Table 5, which presents the classroom control achievement scores for the High and Low classroom control groups by class (i.e., Best and Worst), it can be concluded that the measuring instrument (i.e., the eight classroom descriptions) did permit the required discriminations. A t test for the difference between the means of 6.09 and 4.92 for the Best class was 3.34 (P less than .005). A t test for the difference between the means of 5.95 and 4.11 was 3.83 (P less than .005). For the total difference between the groups in classroom control achievements, a t of 4.48 was significant beyond the .0005 level. Thus, in showing that similar achievements did occur in similar situations, the classroom control measuring instrument was validated and Hypothesis 3 was confirmed. It should be noted, however, that this validation holds only for the gross differences in ability that exist between groups of teachers since the mean difference between the Best and Worst classes was not significant. Thus, to detect differences in achievements within persons, an instrument permitting finer discriminations would be required.

As suggested in Chapter 4, the data collected during the first four weeks of the study provided not only a test of Hypothesis 4, but the basis for the decision to reduce the observation time per class to five hours instead of the originally scheduled ten. Hypothesis 4 is concerned with the length of time required for the observers to provide a stable description of the teachers. The decision to reduce the observation time per teacher was based on the confidence ratings of the observers for the ten day observation period, the number of intra-observer agreements on the dichotomous judgments, and the rank order correlations between the 5th and 10th day rankings of the policy descriptions for the teachers observed during the first period (Weeks 1 and 2) and the second period (Weeks 3 and 4) of the study. In general, the amount of additional information provided by the second five hours of observation did not seem to justify the effort and expense involved. Consequently, and without the need for statistical test, the following data are regarded as adequately supporting Hypothesis 4.

An examination of the mean confidence ratings presented in Figure 3 indicates that rule-following descriptions can be applied with some confidence after only a limited (i.e., one hour) period of observation. Since the points on the graph in Figure 3 are means based on the four observers and the 24 policy descriptions, it should be recognized that each of the policy descriptions was not applied with equal confidence by each of the four observers.

Not unexpectedly, the mean confidence ratings continue to increase with the amount of observation time. This increase is apparent in each period of observation but the graph in Figure 3 also shows that the confidence for Period

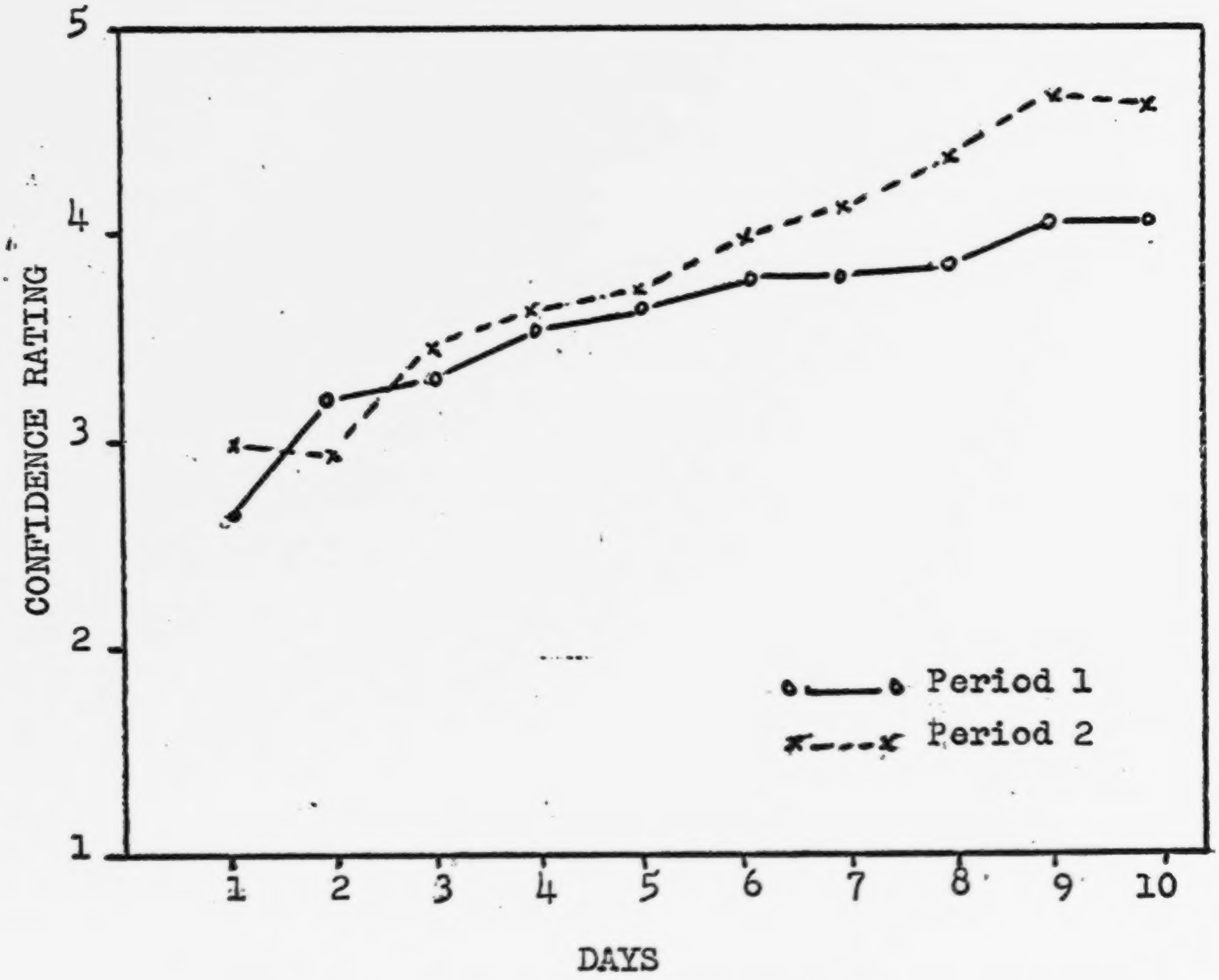

Fig. 3. Mean confidence ratings in judgments of policy descriptions for four classroom observers. (Judgments are: 5-Very confident, 4-Confident, 3-Fairly confident, 2-Slightly confident, and 1-Not sure.)

2 was slightly higher than for Period 1. The increase in both periods simply reflects the fact that, in general, the more time spent in observing a person, the more confident one can be about describing the activities of the observed person. The slightly higher confidence in Period 2 could reflect the increasing familiarity of the observers with the particular policy descriptions employed in the study.

Perhaps it should be emphasized that the decision to reduce the total observation time from ten hours to five hours was based on the consideration of several types of data and not simply the confidence ratings. The data presented in Figure 4 showing the high intra-observer agreement between observation days was also involved in this decision. Although the curves are not parallel to the base line, which indicates that the observers were changing their descriptions slightly (at least during the first five days), the relatively high agreement between the first and second observation days indicates that the descriptions of the teachers did not change substantially after an hour's observation. Again, the reader is cautioned to remember that these are means based on four observers and a simple count of the number of agreements. For any particular observer, policy description, or teacher description, the daily intra-observer agreement might be considerably different. At this point, however, it is only being shown that the decision to reduce the observation time is also supported

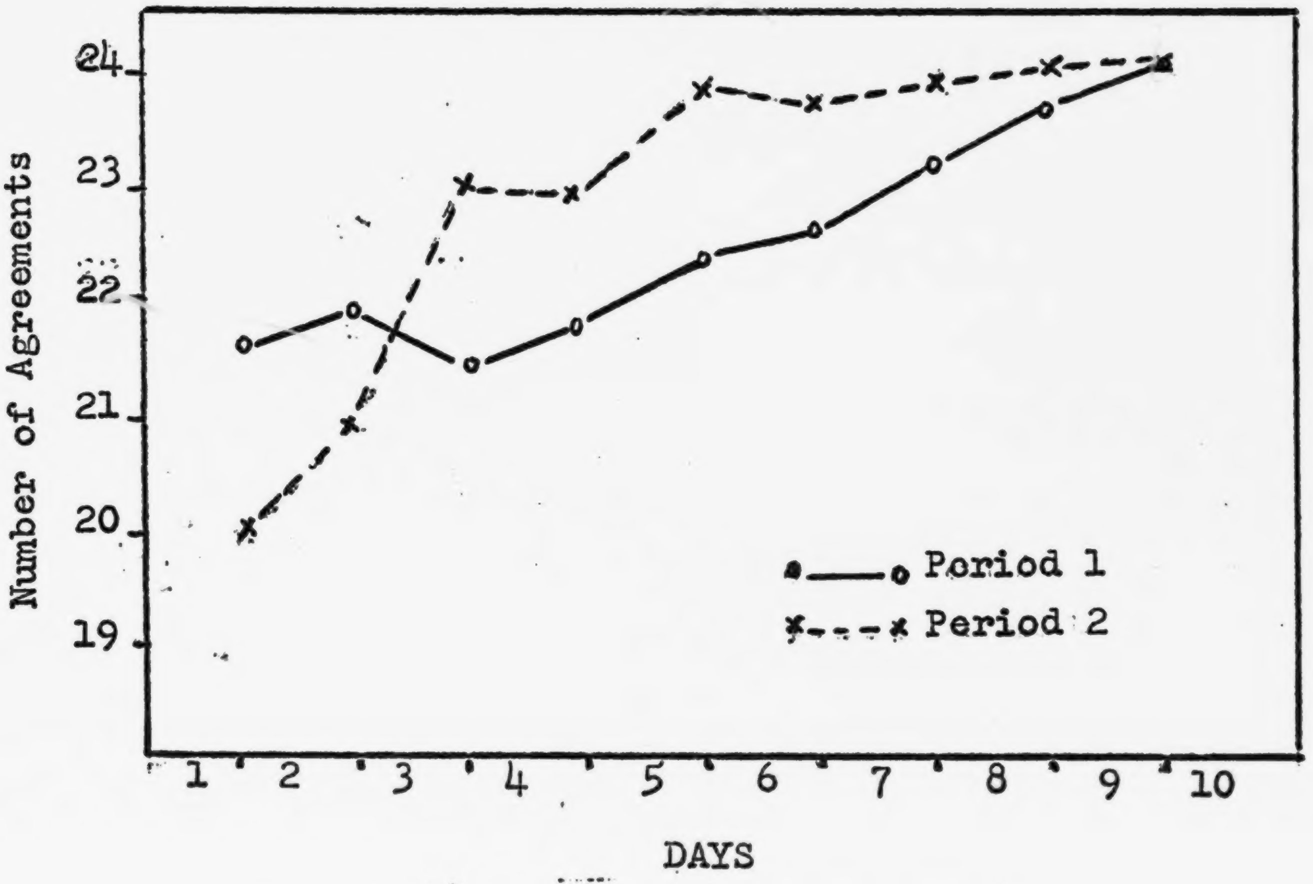

Fig. 4. Mean number of agreements on dichotomous judgments of policy descriptions for four observers with judgments made on the preceding day. (Total possible agreement is 24.)

by the stability of the descriptions provided during the first five days of observation.

The additional evidence which influenced the decision to reduce the observation time is presented in Table 6 which shows the correlations between the descriptions given of the teachers after five and ten hours of observation. These correlations were derived from the rankings of the policy descriptions for each of the four teachers observed by each observer during the first two periods of the study. Since these correlations are relatively high, they indicate that the descriptions given after ten hours of observation were not much different from those given after five hours of observation. Consequently, these data also support the decision to reduce the observation time.

In sum, an examination of the confidence of the observers in applying the rule-following descriptions, along with two indices of intra-observer agreement, resulted in the decision to reduce the observation time before the study was completed. The additional information which might have been gained by continued observation of the teachers by the same observer did not seem to justify the time or expense involved.

The only type of observer agreement which is available for examination, given the design of the main study, is intra-observer agreement. Some information on these data has already been provided since they contributed to the decision to reduce the observation time. Tables 7 and 8

Table 6

Rank Order Correlations Between
The Fifth and Tenth Day Rankings
of the Policy Descriptions

	Observers[a]			
	1	2	3	4
Period 1[b]	.93 .92	.89 .88	.86 .72	.75 .86
Period 2	.75 .81	.69 .85	.91 .92	.90 .96

a. Each observer observed two classes during each period

b. Each period consisted of observation for 10 days.

present data based on most of the observations made during the study. These tables include the data already presented, but exclude the observations made during the second five hours for the first two periods of the study, since only five hours of observation were used for the teachers during the last four weeks of the study.

The intra-observer agreement was computed by counting the number of agreements (Dichotomous data) with the judgments made on previous days. The means and standard deviations of these judgments are presented in Tables 7 and 8. As can be seen from Table 7, the observers had somewhat more difficulty in describing the teachers in the Worst classes observed.

Table 8 shows that the observers did not differ in the mean number of intra-observer agreements. Each entry in Table 8 is the result of summing the number of agreements across teachers and between days for the Dichotomous data. From an examination of this table, it appears that the application of rule-following descriptions was a task which all of the observers could do with relatively little difficulty since the total number of agreements possible was only 24.

Table 9 provides data which indicate the perceived consistency in policy following as reported by the teachers themselves and the Permanent observers for the three types of data collected. Although the difference between the mean correlations of .82 and .72 indicates a significant

Table 7

Intra-observer Agreement on Dichotomous Judgments by Class and Classroom Control Grouping

	Best		Worst	
	Mean	S.D.	Mean	S.D.
High CC	22.8[a]	1.88	22.4	2.52
Low CC	22.8	1.80	21.2	3.15

Note.- Data are based on number of agreements between days for all observers for first five days of observation.

a. Number of possible agreements is equal to 24

Table 8

Intra-observer Agreement on Dichotomous Judgments by Observers

Observer	Mean	S.D.
1	22.6[a]	2.57
2	22.5	2.20
3	22.9	1.46
4	22.6	2.16

Note.- Data are based on number of agreements between days for each observer for first five days of observation.

a. Number of possible agreements is equal to 24.

Table 9

Perceived Consistency in Teacher Behavior Between Classes

	Teacher	Self[a]	Permanent Observer		
		Meas.	Dichot.[b]	Rank	Meas.
High CC	13	.82	24	.87	.99
	4	.87	23	.88	.97
	5	.96	24	.91	.85
	6	.74	17	.53	.59
	15	.81	18	.87	.77
	9	.72	18	.16	.81
	12	.85	21	.80	.90
	1	.46	17	.47	.57
	Means	.82	20.2	.76	.88
Low CC	7	.91	24	.84	.81
	3	.78	24	.81	.86
	2	.41	24	.81	.89
	8	.48	21	.70	.75
	14	.30	16	.28	.84
	11	.97	17	.70	.82
	16	.45	20	.76	1.00
	10	.70	14	.21	.41
	Means	.72	20.0	.68	.87

a. Teacher's self-description in Best and Worst classes.

b. Dichotomous data based on number of agreements out of possible 24.

difference between the groups in the teachers' perceptions of their behavior (z equal 2.36; P less than .02), the data suggest that the observers did not see any differences.

Table 10 presents a characterization of the classroom control groups in terms of some characteristics of the teachers and the curricular status of the classes observed. Although there was no attempt to control for sex, experience or class requirements, these variables would not appear to be highly related to the quality of classroom control achieved. The one possible exception would be experience, since the High CC teachers had more years of experience than the Low CC group; however, the range of experience for the High CC group extended from below that of the Low CC group to above it. Thus, the quality of classroom control is clearly not a simple function of the number of years of teaching experience.

Observer Agreement Study

The observer agreement study occurred during the seventh and eighth weeks of observation after the collection of the Dichotomous and Rank data for the main study. The time was made available by the reduction of the observation time per class discussed above.

The seven teachers used in this study were the last teachers to be observed in the main study and were used for checking observer agreement because the earlier teachers had been advised that they would only be observed for a total of ten days. In this study, the observers worked

Table 10

Some Characteristics of the Classroom Control Groups

	Sex		Years of Experience		Type of Class	
	M	F	Mean	S.D.	Required	Elective
High CC	4	4	10.9	5.5	12	4
Low CC	5	3	8.4	2.5[a]	12	4

a. Experience data not obtained for one teacher.

in pairs and all possible pairings of observers were made.

The data in Table 11 indicate that observer agreement in the application of rule-following descriptions is not independent of the quality of classroom control. As can be noted in Table 11, the classes observed are arranged in descending order of classroom control achievements. The relative positions of these classes in the total distribution of classroom control achievements for the 32 classes observed are also provided. Examination of the rate of agreement between observers for the three types of data presented in Table 11 indicates that rate of agreement varies with classroom control quality. To provide a quantitative index of the relationship between the rate of agreement and classroom control, the three types of data and the classroom control achievement scores were ranked and correlations computed. The Dichotomous data correlated .96 with classroom control achievements. This means that the number of agreements between observers in regard to the appropriateness or inappropriateness of the policy descriptions depended to a great extent on the quality of classroom control which existed. The correlation of .81 of the Rank data, and .78 for the Measurement data, with classroom control require similar interpretations. The fact that the Rank and Measurement data correlate to a lesser extent, however, indicates that the relationship between observer agreement and the quality of classroom control is influenced in part by the type of measurement

Table 11

Rate of Agreement on Teacher Descriptions Between Observers

Teacher	Class	CC Rating	CC Position[a]	Observers	Type of Data		
					Dichot.[b]	Rank[c]	Meas.[d]
9	B	6.8	1	3 & 4	21	.93	.89
4	B	6.2	4.5	1 & 2	22	.61	.77
5	W	6.1	9	2 & 3	20	.70	.73
6	W	6.1	9	1 & 2	19	.61	.31
1	B	5.3	20	3 & 4	19	.78	.75
9	W	5.0	22	1 & 4	18	.58	.66
8	W	4.5	27	1 & 3	15	.39	.45
14	B	3.4	29	2 & 4	14	.34	.05

a. Entries are rank (from high to low) of class in classroom control distribution of 32 classes.

b. Dichotomous data are based on a count of the number of agreements between observers out of a possible 24.

c. Rank data are Spearman rank order correlations.

d. Measurement data are product moment correlations.

instrument employed.

The extent of the correlations between the amount of observer agreement and the classroom control scores suggests that there might have been a common bias among the observers which influenced the policy descriptions of the teachers. That is, it might be that the observers ignored what rules the teachers were following and used the policy descriptions as a second measure of classroom control. In the simplest case, the use of the policy descriptions as a measure of classroom control would involve assigning "good" policies to "good" (i.e., high control) teachers and "bad" policies to "bad" teachers.

In order to determine if the observers used the policy descriptions in this fashion, it is necessary to have some index of the agreement which existed among the observers as to what policies were "good" and "bad." This was accomplished by having the observers rank the descriptions as if they were observing an ideal teacher. These Ideal data were then examined by means of the Coefficient of Concordance to detect the extent of similarity in the rankings. This was done twice during the study. The $\underline{W}$ for the mid-project data was .72; the $\underline{W}$ obtained at the end of the project for the Ideal teacher rankings was .65. (For comparison purposes, the average rho between observers for a $\underline{W}$ of .72 is .63; a $\underline{W}$ of .65 indicates an average rho of .53. The $\underline{W}$ required for significance at the .05 level is .38.) The first point to be noted, then, in regard to the influence of a common bias among the observers, is that while there is a statistically significant similarity in the rankings assigned to the policy descriptions for the Ideal teacher, the agreement among the observers is not excessively high.

The second point that should be noted is the lack of high agreement between observers for teachers having low classroom control achievements. If a common bias influenced the teacher descriptions in the simple fashion suggested above, then the rate of agreement should be as high for Low CC teachers as it is for the High CC teachers. Since this clearly is not the case for any of the three types of data shown in Table 11, it is obvious that if a common bias influenced the teacher descriptions at all, the nature of the influence was not one of assigning "good" policies to "good" teachers and "bad" policies to "bad" teachers.

The third type of evidence which should be examined in considering the influence of a common bias on the teacher descriptions is presented in Table 12. This table shows the agreement between the descriptions of all of the teachers by the Permanent observers with the descriptions of the Ideal teacher given by the same Permanent observers. Since the teachers are arranged in a descending order on the basis of classroom control achievements, it is apparent from Table 12 that the Dichotomous data are the only data that show a relationship with classroom control achievement.

Table 12

Agreement Between Teacher Descriptions and Ideal Descriptions by Permanent Observers

	Teacher	Observer	CC Rating		Dichot.[a]		Rank[b]		Meas.[c]	
			B	W	B	W	B	W	B	W
High CC	13	2	6.5	6.4	21	21	.05	-.01	.03	.03
	4	3	6.2	6.2	19	18	-.07	-.10	-.20	-.20
	5	1	6.2	6.1	21	21	.01	-.05	.12	-.12
	6	3	6.1	5.8	18	21	-.07	-.18	-.24	-.12
	15	4	6.1	5.8	18	22	-.25	-.37	-.19	-.33
	9	2	6.8	5.0	20	17	-.02	.07	-.09	.06
	12	4	5.8	5.8	17	17	-.10	-.09	-.08	-.04
	1	2	5.3	6.2	14	19	.34	.15	-.06	.10
Mean					18.5	19.5	-.01	-.09	-.09	-.08

			B	W	B	W	B	W	B	W
Low CC	7	1	5.7	5.8	16	16	-.50	-.42	-.31	-.26
	3	2	5.8	5.1	17	19	.18	.05	.15	.05
	2	1	5.5	4.9	18	18	-.12	-.11	-.11	-.03
	8	4	5.4	4.5	17	14	-.13	-.09	-.02	.14
	14	1	3.4	4.6	17	17	-.10	.12	-.28	-.14
	11	3	4.7	2.9	15	8	-.58	-.17	-.32	-.27
	16	3	4.1	3.1	9	11	.05	-.26	-.05	-.05
	10	4	4.8	2.0	9	1	.36	.27	.31	.52
Mean					14.8	13.0	-.12	-.08	-.10	.00

a. Dichotomous data are based on number of agreements with Ideal out of possible 24.

b. Rank data are Spearman rank order correlations.

c. Measurement data are product moment correlations.

That is, the number of agreements (out of a possible 24) with the Ideal decrease as the quality of classroom control decreases. This is clearly not the case with the Rank and Measurement data. Quantitative indices of these relationships were obtained by ranking the data presented in Table 12 and computing correlations between classroom control rankings and the rankings of the three types of data. The Dichotomous data correlated .87 for the Best class and .79 for the Worst class. The Rank data correlated .02 for the Best and -.02 for the Worst classes with classroom control. The Measurement data correlated with classroom control to the extent of .18 for the Best class, and -.14 for the Worst class. These data will be considered to a greater extent in the discussion in Chapter 6.

In sum, the data examined in regard to the influence of a common bias among the observers in the descriptions of the teachers indicate that such a bias, if present at all, is of limited significance in accounting for the different descriptions given to the two groups of teachers. Although the rate of agreement between observers is related to the quality of classroom control, a hypothesis that such a differential rate of agreement reflects the operation of a common bias among the observers is untenable.

CHAPTER 6

DISCUSSION

It is clear that additional research will be required if the thesis presented in Chapter 3 is to be accepted. It was maintained there that it should be possible to distinguish among the many classroom control prescriptions provided by teachers and educators by identifying which were useful and which were not. Usefulness was to be determined by observational studies which used the content of the prescriptions as descriptions to be applied to teachers who varied in their classroom control achievements. As a consequence of such studies, those descriptions which were found to discriminate between high and low achievers would be accepted as content to be used in teacher training courses.

It was recognized in Chapter 3 that this identification task would require a considerable amount of conceptual and empirical work. The results presented in Chapter 5 provide some indication of the direction that this work should now take if the goal of training future teachers is to be achieved. Since the results demonstrate that rule-following descriptions can be applied within a limited amount of time, and that this type of description does enable a discrimination between teachers differing in classroom control achievements, the objectives of the present project have been attained. The lack of a significant group by policy interaction in the main study, however, restricts the contribution of this study to the specific objectives stated in the hypotheses. Thus, there is no substantive contribution beyond the identification of a set of 24 policy descriptions which have been demonstrated to make the necessary discrimination only when all 24 are used at the same time.

Additional empirical work is required since the sample may not be representative. In addition, an increase in the size of the sample may facilitate the detection of the interaction necessary for the examination of the discriminating power of individual policies. Although there is no evidence that the sample is not representative of junior high school teachers, the practical basis on which it was selected (described in Chapter 4) makes it necessary to check the adequacy of the sample. Since the present study has presented a useful technique for validation and some evidence for the validation of the classroom control measuring instrument which could be used, such an empirical check should be a routine matter.

While continuing the necessary empirical work, the conceptual implications of the results presented here could be examined in more detail. It is clear, for example, that the application of the policy descriptions was not a task which was uniformly difficult in high and low control classrooms. This suggests that a set of descriptions which can be used with equal facility in both types of classrooms should be different in some fashion from those used here. Using the policy descriptions as activity descriptions undoubtedly eliminated much of the difficulty which would be present if action or deliberate action descriptions had been used. However, it is apparent that the ambiguity in behavior of low classroom control teachers requires more consideration.

A more complex problem is generated by the finding of significant group differences but the absence of a significant group by policy interaction. While no conclusions could be based on the lack of the significant interaction, it may be the case that the path projected towards the achievement of more adequate teacher training need not involve the steps identified in Chapter 3. Although such interactions may be found in future empirical work, a pursuit of the discriminating individual policies may be misconceived. Perhaps the goal of training teachers could be achieved by following an alternative path. It may be, for example, that the important difference between high and low classroom control achievement teachers is not that high teachers follow different policies, or even that they follow the same policies as low teachers but to a greater extent. Perhaps what is important is that a teacher do enough of the right sorts of things (Ossorio, 1966a); but, in addition, these actions should involve a recognizable performance so that there would be no question about what she was doing. Although "enough of the right sorts of things" could easily become a hackneyed phrase, it may well be an appropriate phrase to describe what is the case insofar as classroom control is concerned. If this were the case, the important empirical tasks would be to identify what kinds of behavior would count as the right sorts of things, and how teachers could be trained to engage in recognizable performances. It would not be expected, however, to find in empirical research that each category (i.e., policy) of such actions would discriminate between high and low control teachers. It would be expected that high and low control teachers would differ in the number of policies followed; or they might differ in the extent to which their policy following involved recognizable performances. Thus, since high control teachers might be following different policies that are similar only in being "the right sorts of things," enough of these right sorts of things performed unambiguously could provide a mean difference between high and low control groups. However, an interaction between policies and group would not be expected since the mean difference could be produced by high control teachers following more of the policies but with different policies being most appropriate for different teachers.

The results of the present study are compatible with this interpretation since the mean difference between groups was significant and the interaction between groups and policies was not significant. Moreover, as mentioned in Chapter 5, the policy descriptions could be judged by the observers as being more clearly appropriate or inappropriate for high control teachers. This would suggest that high control teachers engage in more recognizable performances. In addition, the finding that the number of agreements in the Dichotomous data with the Ideal teacher correlated highly with classroom control, while there was a zero correlation between classroom control and the Rank and Measurement correlations with the Ideal, also support the argument that "enough of the right sorts of things" makes the difference in classroom control. If we can assume that the Ideal ratings arrange the descriptions into sets of the right sorts of things and the wrong sorts of things, then the number of agreements in dichotomous judgments with Ideal would be expected to correlate highly with classroom control. And since high (and low) control teachers might differ in terms of the particular subsets of descriptions which were most appropriate, the correlations based on the ordering of the entire set of 24 descriptions would necessarily be low. Thus, the agreement with Ideal in the Rank and Measurement data would not be expected to correlate with classroom control.

Consequently, it is required that one engage in a reexamination of the basic thesis concerning the identification of policy descriptions which discriminate between high and low classroom control teachers.

3 On the other hand, one should not overlook the

alternative that the particular policy descriptions employed in this study should also be re-examined. While the descriptions used permitted a discrimination between groups, it could be the case that this particular set of descriptions is not the most relevant for making this discrimination. From an examination of this set of descriptions, it is clear that the content of the descriptions is strongly influenced by what teachers now regard as the kinds of actions which are important in maintaining classroom control. Since these descriptions did permit a discrimination between groups, this content has been validated to some extent but the lack of a significant group by policy interaction suggests that this kind of content may not permit the identification of discriminating policies. This identification might require that different ways of categorizing teacher actions should be examined.

At least two alternatives are suggested by the present research. Perhaps classroom control is largely a matter of always engaging in actions that are immediately intelligible to pupils. Or, perhaps it is a matter of the teacher engaging in actions which permit students to describe her in terms of the policies being followed, preferably by verbalizing the policies but also by being able to describe her in terms of a prepared list of policy descriptions. Both of these alternatives are suggested by considering whether pupils could do what the observers did. It is unfortunate that the pupils were not asked to describe the teachers by means of the policy descriptions in this study. It could be hypothesized, for example, that pupils in high control classes would provide teacher descriptions more similar to those given by the teacher, than would be the case for low control classes.

In any event, since every action can be described as following some policy, the value of such considerations might become apparent in the construction of a list of policies that would categorize teacher actions differently than they were categorized in this study. These different categorizations might be more likely to produce identification of particular policies that discriminate between high and low classroom control teachers, and thus validate the approach outlined in Chapter 3.

As a first step in the complex course of action leading to the goal of more adequate teacher training, this study is regarded as validating the conceptualization and methods employed. Although psychological and educational researchers exhibit an apparent distrust of approaches which permit observers to make complex judgments, it is clear from this study that the treatment of observers and teachers as Persons permit the use of descriptions that cannot be given adequate operational definitions. In addition, it should be emphasized that studies which involve "checklist judgments" by observers, even if such lists include descriptions of actions rather than "responses," cannot be regarded as comparable to this study in the type of judgments required. To make a judgment about the policies followed by teachers is not simply to sum up frequency counts of actions that might be relevant in some way to the policies. It is as difficult to specify the criteria for application of rule-following descriptions as it is to specify the criteria for the application of any person description (cf Ossorio, 1966a). Consequently, the application of rule-following descriptions cannot be broken down into simple operations such as counting frequencies. However, a fact which must be accepted is that persons do apply such descriptions. To treat observers as Persons, then, is to be able to make use of descriptive resources that are otherwise unavailable.

In summary and conclusion, it should be restated that the present study represents the first step in a complex course of action. Since achieving the goal of training teachers to be more competent in classroom control will be the result of a course of action, as distinguished from engaging in social practices, it must be recognized that the path projected toward that goal may change direction depending upon the results obtained by particular actions (i.e., empirical studies). Although the results of the present study validate to some extent the conceptualization of the projected path towards the ultimate goal, it is clear that additional conceptual and empirical work is required. Thus, the present study does show that rule-following descriptions can be applied by observers in a limited amount of time, and that rule-following descriptions do permit a discrimination between teachers who vary in classroom control achievements. Other results, however, suggest a re-examination of the thesis that it will be necessary to identify individual policies which discriminate between high and low classroom control groups.

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APPENDIX A

OBSERVER'S TRAINING MANUAL

FOR

AN OBSERVATIONAL STUDY OF CLASSROOM CONTROL

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August 1968

INTRODUCTION

The purpose of this research is to identify similarities and differences among teachers in their maintenance of classroom control. The concept of classroom control is extremely complex and involves the consideration of almost all of the interaction between the teacher and students. This is the case because that which is being "controlled," when we speak of classroom control, is the relationship that exists between the teacher and students. Usually, the dominant figure in the interaction between the teacher and the students is the teacher, and it is the expectation of the society that the teacher should be in control of the actions of the students at all times. This research is concerned with describing teachers as they attempt to fulfill this expectation.

The alternatives available to the teacher in controlling the relationship that will exist between her and the students are varied; and one could expect to find that teachers differ in the extent to which they make use of the different alternatives as a function of their abilities, training experiences, and personality characteristics. Roughly, the alternatives available can be categorized into two main types: direct and indirect. Direct alternatives include all those actions by the teacher which are specifically directed towards informing the students what the nature of the relationship will be. This would include such things as limiting the kinds of topics discussed with a student, concern with the notion of the respect that a student should owe to the teacher, the use of techniques to maintain social distance (e.g., the use of titles instead of first names), and many others. The important feature of direct alternatives is that the nature of the teacher-student relationship is directly involved in the interaction.

Indirect control alternatives that are available to the teacher include those actions of the teacher which are concerned with maintaining control of other relationships. Other relationships which the teacher is expected to control are: 1) student-student, 2) student-task, and 3) student-facility. A teacher defines the relationship that will exist between the students by such actions as seat assignments, group task assignments, and explicit statements which designate how and under what conditions the students will be permitted to interact. The student-task relationship is defined by the teacher when she determines the task, states when and how a task is to be performed, and accepts or rejects a student's efforts by the standards for what counts as an acceptable performance. The relationship between the student and the facilities in the room (e.g., pencil sharpener, etc.) is defined by stating when, and by what procedures, a student has access to such materials. In defining such relationships, the teacher is also defining the relationship that will exist between her and the students by making it clear to the students that she is the one who controls these other relationships.

Control alternatives which are difficult to classify as being direct or indirect (because they can be seen as being either) include those actions which the teacher might take when the student attempts to control the definition of the relationships that will exist between him and the teacher, task, facilities, or fellow students. Usually, such attempts by the students are labelled "deviancies" or "discipline problems" or "classroom disturbances." These labels suggest that such student actions present a different task for the teacher, requiring different skills, abilities or special personality characteristics. The concept of classroom control permits an integrated view of the classroom situation which is not provided by viewing such student actions as disruptions of something that was going on which is replaced by something else. In a real sense, the same thing is always going on (i.e., control of the teacher-student relationship), but there are simply many facets to such a task. To see such student actions as attempts to control the relationships in which they engage permits one to maintain a focus on the basic task of the teacher--the definition of the teacher-student relationship. Thus, differences between teachers in terms of classroom control would not be simply the differences which were found in their responses to undesirable student actions. In assimilating the teacher's responses to student attempts to control as only one aspect of the teacher's task of defining the teacher-student relationship, we can perhaps identify more clearly why such attempts by students occur more frequently with some teachers, and why two teachers who are apparently responding in the "same way" to undesirable actions produce different results.

It should be recognized that the foregoing distinctions are analytic and that they do not refer to separate and distinctive actions of the teacher. Thus, any particular action by the teacher might be simultaneously an action which provides a definition of the teacher-student relationship in both a direct and an indirect way. This is only a reminder that any behavioral analysis or description is not to be taken as a linguistic reflection of the behavior (e.g., as a mirror reflects an object), but is only one of many analyses or descriptions that could be given.

The research problem, then, is one of describing teachers who are engaged in actions of defining the relationships that will exist between them and the students in the classroom. There are probably any number of descriptions that could be applied to teachers, and they have been described in terms of attitudes, values, training experiences, personality variables, social class, etc. This research will ignore such descriptions and attempt to describe teachers in terms of the policies or rules that they follow in controlling the definition of the teacher-student relationship.

It should be emphasized that this type of description of the teacher is noncommittal relative to the desirability of of the type of relationship which teachers establish. To describe teachers in terms of the policies they follow in controlling the relationship they have with students is not to evaluate the relationship, nor to evaluate the policies. Although historically some policies have been elevated to prescriptions (e.g., "Spare the rod and spoil the child"), there would seem to be little evidence, at least in the professional literature, which would suggest that it is more desirable to follow some policies rather than others.

The task of the observer in this research then is not to decide whether the teacher has a "good" or "bad" relationship with the students, or whether "good" teachers follow "good" policies. From the standpoint of research methodology, such judgments "contaminate" the results, and it would be better if such judgments were not made. However, this is an impossible ideal and as observers, you are likely to make such judgments even though you will not be recording them. It should be noted, though, that the tendency to make such judgments may make the task of describing teachers more difficult, and the observers must be especially alert to the influence that evaluations of the teachers and policies might have in their reports.

In order to minimize the effect of such judgments, as all of the observers will be observing all of the teachers participating in this project, the following rules will be in effect regarding any discussion of the project:

1) No evaluation of a teacher or policy will be expressed at any time.

2) The observers will not discuss anything about the project among themselves at any time except during the training sessions.

3) During the training sessions, any incident discussed will not be identified in terms of the class in which it occurred.

The task of the observer in this project will be to describe the teacher he observes in terms of a list of twenty-four policy descriptions. This will be done by having the observers describe the teachers in terms of how frequently they followed the policy, and by ranking the policies in terms of how important they are to the teacher's descriptions. Prior to making these judgments, the observers will observe a class for ten days. On each day, the observers will make judgments about the appropriateness of each of the twenty-four descriptions and will state the degree of confidence that they have in these judgments. It is not expected that the daily observations will be independent, so the increased familiarity with the teacher should permit the observer to make more accurate judgments about the appropriateness of the descriptions provided. This is not to suggest that the twenty-four descriptions will require an equal amount of observation time before one could be very confident that they were appropriate or inappropriate; nor does it mean that the observer will be most confident on the last day of observation. Quite frankly, no one can say how long one must observe before maximum confidence is attained in giving policy descriptions, but we do know that individuals differ in the confidence that they have in their judgments. And it would appear that this confidence is not simply a function of the length of observation time, but rather is related also to other variables such as the complexity of the phenomena being observed, the skill and sensitivity of the observers, and other personality characteristics.

The descriptions provided in the Observation Report can all be judged as being appropriate or inappropriate at the completion of a single hour's observation. Undoubtedly, there will not be equal confidence for all of the judgments after such limited observation, but the technique for recording judgments recognizes this by having the observers record their judgments in the following way:

1) The observer records whether the description is appropriate or inappropriate;
2) The observer records his degree of confidence in his first judgment on the following scale:
    1. Unsure
    2. Slightly confident
    3. Fairly confident
    4. Confident
    5. Very confident.

Thus, the second rating to be made by the observer is basically the following: "How strongly do I feel that this description is consistent or inconsistent with what I have observed so far about this teacher?" Generally, the more contact that we have with others, the more confident that we are of the descriptions that we apply to them, unless we find that the behavior of some others is so complex or mysterious that no description that we can give seems comprehensive enough to cover everything that we observe. In such cases, of course, we may be no more confident after a long period of observation than a short one. This calls attention to the fact that in giving descriptions, we must always remain on the alert for relevant actions which may or may not be compatible with the descriptions that we have already given. This relates to the present study in the following way: Increased contact with a teacher may make an observer more (or less) confident about the appropriateness of the descriptions which are available. The observer must be cautious to avoid actions which are relevant to the descriptions that he has already judged, perhaps with great confidence. To do so would suggest that he can describe a person as well at the end of an hour as he could after much longer contact. Obviously this is not the case in our contacts with people in our daily lives. In some cases, we are able to describe people "accurately" after only a short acquaintance, but occasionally we meet people that are very difficult to describe. One could expect that the same state of affairs will exist in this project. Some teachers will be more easily described than others, but the observer should remember that additional observation can contribute to the validity of a description only if he remains alert to relevant actions and situations during the entire observation period.

TEACHER DESCRIPTIONS

The comments provided with each description are intended to facilitate judgments by indicating the time during a class period that relevant actions of the teacher are likely to occur, and/or to provide illustrations of the type of actions that would be relevant to the description. It should be clear that the comments do not define the description, nor are they to be considered as exhausting the types or number of actions which could be subsumed under the description. It would be impossible to list all of the actions that might be considered as relevant to the decision that a description was appropriate or inappropriate. In making such judgments, the following considerations should be kept in mind by the observers:

1) If it appears that situations which could be regarded as relevant to the descriptions do not occur, then the observer would have low confidence relative to the appropriateness or inappropriateness of the description. However, it has been suggested earlier that this list of descriptions is capable of being rated after only an hour's observation; therefore, it is necessary for the observer to be sensitive to what might be considered "borderline" situations as well as the obvious ones. For example, consider the description "This teacher permits the students to express their feelings freely." A "full-blown" case to which this description might be applied could be one where the teacher spends some time after giving back test results in responding to the frustration, disappointment, or whatever feelings the students might have. There would be no reprisals by the teacher even if the expressions of feelings might seem to be a threat to the teacher's

authority, or the showing of disrespect for her as a teacher, adult, or person. It is doubtful that the observers will ever be exposed to such a full-blown case. However, an observer might see expressions of frustration (e.g., slamming down a book, etc.) which do not meet with reprisals by the teacher although she does not spend time discussing the student's feelings, and might not even express awareness of how the student feels. In this case, one can see that the expression of feeling was not inhibited by the teacher and would describe her accordingly. (However, further observation might lead one to conclude that this was the only type of expression permitted by the teacher and thus one would probably question his previous conclusion.)

2) If the observer does note that relevant situations occur but the teacher does not engage in actions which are compatible with the description, then the observer would record the judgment that the description was not appropriate.

3) The task of the observer in this project is to provide a description of teachers in terms of the policy descriptions. Extended observation time is being provided because it is not clear how long one must observe before it is possible to perform this task. It is obvious, then, that the observer is not to "forget" anything about the teacher that he observed the day(s) before, as it may be the cumulative observations that permit such a description. Nevertheless, it is not expected that the observer will attempt to remember the actual ratings given for each description on previous days. Thus,

one may remember the teacher as permitting the students to express their feelings. If the observer now sees something which is incompatible with that description, he wauld probably have reduced confidence in the appropriateness of the remembered description (or, depending upon what he now observes, the observer may be very confident that the description is inappropriate, i.e., that his previous judgment was incorrect.). If he sees things compatible with his memory of what the teacher was like, his confidence is likely to be increased. This is exactly the way we respond whenever we are attempting to describe any complex phenomena with which we have extended contact.

When the observer begins to observe a different class of the same teacher, however, he should be prepared to reorient himself as the descriptions appropriate for the teacher in one class may not be appropriate for another. While the observations cannot be regarded as statistically independent, the observer should be prepared to present teacher and class descriptions which are based on the classes being observed, and not "carry over" descriptions from previous observations which may no longer be appropriate.

1. THIS TEACHER TAKES PAINS TO ENSURE THAT EVERYONE UNDERSTANDS TASK ASSIGNMENTS AND/OR DIRECTIONS.

Note how assignments are given--Are there expressions of irritation by the teacher when students ask questions about it? Note if teacher asks questions, etc., to ensure that everyone understands.

2. THIS TEACHER TALKS A LITTLE ABOVE THE HEADS OF THE STUDENTS.

Note vocabulary, subtlety, use of similarities, analogies, metaphors, etc., while lecturing or discussing course content. Do most students seem to understand and be able to answer teacher's questions? Do students seem to miss subtle humor, or abstract connections which teacher makes?

3. THIS TEACHER LETS STUDENTS GET AWAY WITH INCOMPLETE OR SHODDY WORK.

Note discussion of homework and seatwork--Note also incomplete answers to questions asked by teacher--Does teacher check to see if students have completed assigned seatwork or homework?

4. THIS TEACHER "TALKS DOWN" TO STUDENTS.

Any verbal behavior of teacher might illustrate talking to the students as if they were incapable of understanding the simplest notions. In general, note use of vocabulary, tone of voice, content of comments, that might be more appropriate for younger age group.

5. THIS TEACHER FINDS SOMETHING ABOUT THE TASK THAT IS RELATED TO THE STUDENTS' INTERESTS.

Note particularly the introduction to tasks--Also when students seem to be getting bored or restless. Any relating of task content to students' lives outside of classroom would count here.

6. THIS TEACHER GIVES TASKS WHICH REQUIRE OR PERMIT STUDENT INITIATIVE OR IMAGINATION.

Do assignments or questions tend to focus on facts only, or is emphasis placed on organizing facts in different ways, or are the students encouraged to attempt to extrapolate from facts known, or to speculate as to what might have happened had certain facts been different? Are there any attempts to get the students to go "beyond the book" in some way?

7. THIS TEACHER TREATS STUDENT DISTRACTIONS FROM THE TASK AS A SERIOUS MATTER.

What is the response of teacher when students are not task-oriented? Does she act as if such actions are to be expected? Does she always respond with a simple desist? Are a lot of distractions ignored? Does teacher permit students to "get her off the subject?"

8. THIS TEACHER TAKES GREAT PAINS TO APPEAR FAIR IN GRADING OR PUNISHING.

Whether teacher _is_ fair is irrelevant--Does she go to some lengths to explain to students _why_ grade or punishment is what it is or does she act as if she does not have to justify her actions to the students? Does teacher indicate in any way that her grading or punishing is "objective?"

9. THIS TEACHER MAINTAINS CLOSE SUPERVISION OF THE USE OF CLASSROOM FACILITIES.

When students leave their seats for use of pencil sharpeners, etc., are they permitted to dawdle? Are there restrictions on the use of facilities (e.g., one student at a time, or when the teacher is talking, etc.)? Do several students leave their seats simultaneously?

10. THIS TEACHER RESPONDS IMMEDIATELY TO ANY STUDENT DISORDER.

Does "noise level" of classroom tend to build up before teacher responds? Does teacher ignore minor distractions? How much can students get away with before teacher responds?

11. THIS TEACHER FREELY EXPRESSES AFFECTION FOR THE STUDENTS.

Is there considerable emphasis placed on maintaining social distance (e.g., use of titles like Mr. or Miss)? Is the teacher generally "all business?" Does teacher express interest in personal lives of students?

12. THIS TEACHER PERMITS THE STUDENTS TO EXPRESS THEIR FEELINGS FREELY.

Note response of teacher when students express feelings of frustration or anger, pride or satisfaction, etc.--Note period immediately following test or disciplinary actions of teacher, or during difficult lecture, etc.

13. THIS TEACHER REQUIRES STRICT COMPLIANCE WITH SCHOOL RULES.

Are violations of school rules noticed by teacher? Does teacher make any statements which suggest that she does not support the rules wholeheartedly?

14. THIS TEACHER REQUIRES STUDENTS TO COMPLY IMMEDIATELY WITH DESIST COMMANDS.

Does everything "stop" until student complies? Do students seem to take simple desist commands seriously, or is the teacher often ignored? Does teacher need to repeat such commands frequently?

15. THIS TEACHER USES HUMOR TO EASE DIFFICULT SITUATIONS.

Illustrations of difficult situations are when subject matter is hard to understand--when students are all excited about school activities, etc.--during disciplinary situations, particularly when student denies guilt, or rebels against teacher action.

16. THIS TEACHER USES SARCASM AND/OR BELITTLES STUDENTS IN SOME WAY.

Note when student gives incorrect answer or does inferior work--when group is disciplined--Note also when students reject teacher authority, either as subject expert or in behavior control. Distinguished from humor (as a lot of students might laugh at sarcasm) by noting if object of sarcasm regards the teacher's action as funny.

17. THIS TEACHER TENDS TO BE PUNITIVE.

Many actions of students could conceivably be punished by some teachers, ranging from incomplete or untidy work to actions which students are not supposed to engage in while in the classroom, or to such things as improper dress, etc.--Punishment ranges from use of physical force to making the student lose self esteem by feeling like a fool, etc.--The critical thing to note is whether actions of students which might be ignored by many teachers are punished.

18. THIS TEACHER SHOWS FEELINGS OF FRUSTRATION OR ANGER, ETC.

Feelings of frustration or anger are likely to occur when the teacher is unsuccessful in what she attempts, or perhaps when students try to "get her goat," etc. Variations in mood, even if they are not extreme, would be relevant here.

19. THIS TEACHER USES THREATENING STATEMENTS SPARINGLY.

Threats are generally made when students engage in non-task actions but they can be made when giving assignments or any other time--Statements usually take the form of "If you don't etc." or "Stop that or etc." but threats can be conveyed by a vocal inflection.

20. THIS TEACHER'S MAIN RESPONSE TO STUDENT DISTRACTIONS IS A SIMPLE DESIST.

Whenever a student engages in an action of which the teacher disapproves, the teacher simply says "Stop that" or some similar comment (as opposed to being punitive, sarcastic, ignoring the student action, etc.)

21. THIS TEACHER ENCOURAGES INDIVIDUAL COMPETITION FOR GRADES OR OTHER VALUES.

Great deal of emphasis is placed upon assignments, tests, etc. in terms of the difference they make in grades (as opposed to the extent to which they reflect how well the material is learned). Teacher grades "on the curve" or uses "gold stars" or public recognition to encourage competition.

22. THIS TEACHER USES THE GROUP AS A PUNITIVE AGENT FOR INDIVIDUALS.

Teacher may attempt to get the group to laugh, etc., at a student who does poor work or engages in actions which she finds unacceptable--Is there any attempt to use "group pressure" by threatening a student's position in the group? References to the group being "held back" or suffering in some way as result of individuals' actions illustrates this.

23. THIS TEACHER MAKES USE OF AVAILABLE OPPORTUNITIES TO DEVELOP GROUP SOLIDARITY.

Any attempt to develop a "we" feeling, or frequent references to "we" counts as an attempt to develop a group feeling-- Creating competition with another class might be used to strengthen an "in-group" feeling.

24. THIS TEACHER ATTEMPTS TO UNDERSTAND WHY STUDENTS CREATE A DISTURBANCE WHEN THEY DO.

Questions of the teacher directed towards the feelings of students (e.g., frustration, boredom, etc.) would illustrate this. Also attempts to find out what happened when sudden disturbance occurs would count here (as distinguished from simply telling the students to stop, or being punitive, etc.).

CLASS DESCRIPTION

In giving a description of the class, the observer will record how strongly he agrees or disagrees with the descriptive statements provided. Since the descriptions are those that are frequently applied to the classroom situation, there would seem little need for elaborating upon them here. One possible exception might be number ten which calls for a "global" judgment concerning the overall approach that the teacher uses in dealing with the class. It should be obvious that this is not merely a description of the teacher as it necessitates judgments about the students as well. While the observer must draw upon his total experience with children in making this judgment, he must be especially responsive to the group being observed as each class of students may differ in significant ways from the "average." A valid judgment for this description requires the observer to be sensitive to such differences among students, as the teacher's approach may (or may not) be influenced by these differences.

Appendix B

____
I.D.

OBSERVATION REPORT

Teacher ______________________

Observer ______________________

Class ______________________

Day ______________________

Activity ______________________

I--Inappropriate Confidence 1 2 3 4 5
A--Appropriate Unsure Very high

I A
1 2 3 4 5 1. This teacher takes pains to ensure that everyone understands task assignments and/or directions.

I A
1 2 3 4 5 2. This teacher talks a little above the heads of the students.

I A
1 2 3 4 5 3. This teacher lets students get away with incomplete or shoddy work.

I A
1 2 3 4 5 4. This teacher "talks down" to the students.

I A
1 2 3 4 5 5. This teacher finds something about the task that is related to the students' interests.

I A
1 2 3 4 5 6. This teacher gives tasks which require or permit student initiative or imagination.

I A
1 2 3 4 5 7. This teacher treats student distractions from the task as a serious matter.

I A
1 2 3 4 5 8. This teacher takes great pains to appear fair in grading or punishing.

I A
1 2 3 4 5 9. This teacher maintains close supervision of the use of classroom facilities.

I A
1 2 3 4 5 10. This teacher responds immediately to any student disorder.

I A
1 2 3 4 5 11. This teacher freely expresses affection for the students.

I A
1 2 3 4 5 12. This teacher permits the students to express their feelings freely.

I A
1 2 3 4 5 13. This teacher requires strict compliance with school rules.

I A
1 2 3 4 5 14. This teacher requires students to comply immediately with desist commands.

I A
1 2 3 4 5 15. This teacher uses humor to ease difficult situations.

I A
1 2 3 4 5 16. This teacher uses sarcasm and/or belittles students in some way.

I A
1 2 3 4 5 17. This teacher tends to be punitive.

I--Inappropriate
A--Appropriate

Confidence 1 2 3 4 5
Unsure Very high

I A
1 2 3 4 5 18. This teacher shows feelings of frustration or anger, etc.

I A
1 2 3 4 5 19. This teacher uses threatening statements sparingly.

I A
1 2 3 4 5 20. This teacher's main response to student distractions is a simple desist.

I A
1 2 3 4 5 21. This teacher encourages individual competition for grades or other values.

I A
1 2 3 4 5 22. This teacher uses the group as a punitive agent for individuals.

I A
1 2 3 4 5 23. This teacher makes use of available opportunities to develop group solidarity.

I A
1 2 3 4 5 24. This teacher attempts to understand why students create a disturbance when they do.

CLASS DESCRIPTION

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Slightly Disagree	Not Sure	Slightly Agree	Agree	Strongly Agree

1 2 3 4
5 6 7 1. The students in this class seem to get along with the teacher.

1 2 3 4
5 6 7 2. The students in this class are usually busy with their school work during class time.

1 2 3 4
5 6 7 3. The students in this class get along pretty well with each other.

1 2 3 4
5 6 7 4. The amount of disturbance in this class is usually pretty low.

1 2 3 4
5 6 7 5. The students in this class are pretty cooperative when the teacher asks or tells them to do something.

1 2 3 4
5 6 7 6. Usually the students in this class pay pretty close attention to what the teacher is saying.

1 2 3 4
5 6 7 7. This class is very interesting to the students.

1 2 3 4
5 6 7 8. There are very few, if any, students who cause trouble in this class.

1 2 3 4
5 6 7 9. The teacher in this class seems pretty sure of herself (himself).

1 2 3 4
5 6 7 10. The teacher treats the students in this class in the ways they ought to be treated.

APPENDIX C

PUPIL CLASS DESCRIPTION

INSTRUCTIONS (To be read by observers)

I am Mrs. _______ and for the past eight weeks, several of us have been observing different classes in this school in order to describe what those classes were like. Now, we would like to ask you to describe this class for us. First, though, I want to show you how you are to give your descriptions.

In a minute, I will pass out a form which will have ten sentences that might be used to describe any class. What we would like you to do is to describe this class by saying how much you agree or disagree with each sentence if someone gave it as a description of this class. For example, suppose that sentence number one was: (Put scale and description on board)

1. This class meets in Room _______.

Now you would state whether you thought this was an accurate description of this class by marking a scale like this:

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Slightly Disagree	Not Sure	Slightly Agree	Agree	Strongly Agree

Now that was a pretty easy decision to make and all of you would have marked the same thing because all of you are very sure about where the class meets.

Here is one that might be a little more difficult:

2. The subject matter in this class is easy to learn.

This one is more difficult because there is no simple way to check the accuracy like in the first example. Sometimes the subject might be easy and other times it might be hard, but you are only able to give one answer. What you would have to do is to think back over the year and try to remember how much trouble you had in learning the material. If it was always hard work for you, you would circle the "1," and this would mean that you do not think that this is an accurate description of this class. If you never have any trouble at all, you would circle the "7" because you could agree very strongly that this sentence described the class accurately.

Now notice that on this one, everybody would not circle the same number. Some people might never have any trouble learning the material and they might circle the "7" and other people would circle the "1," "2," or "3", depending upon how much trouble they have in learning the material. If they always have a lot of trouble, they would circle the "1," if they quite frequently have trouble, they would mark a "2," if they had difficulty but not as often, they might mark a "3."

The thing to remember is that you will be given ten statements and you must tell us, by circling a number, how much you think that each statement describes this class. You can do this by saying how much you agree or disagree that the statements are descriptions of this class.

You do not need to be concerned about what other people put down because we are interested in each person's opinion about the class. Also, you can be completely honest in giving your opinion because you will not have to sign your name, and nobody will see what you mark except the man who is doing this research. Are there any questions?

Think about each statement carefully before you mark it and tell us how much you agree or disagree that the statement is a good description of this class. After you have finished, look over your paper to make sure that you have expressed your opinion about all ten statements.

APPENDIX D

TEACHER'S SELF DESCRIPTION

To the teacher:

At the group meeting, you were informed that the purpose of this line of research was the development of a type of description that would be useful in training future teachers to respond effectively to the problems involved in establishing and maintaining classroom control. For several days, an observer has sat in your class in order to discover whether the type of description being considered was one which would discriminate among teachers, how long it took to make such a discrimination, and the extent of agreement among observers that could occur with this type of description. We would now like to see whether self-descriptions by teachers can be given without the benefit of discussion (i.e., training).

Actually, this type of description is one that is already familiar to teachers. Very simply, it is the description of teacher actions in terms of a "rule-following" model of intentional action. It is clear that the complexity of classroom interactions, stemming from the diversity in student and teacher backgrounds, the subject matter, the school district setting, etc., is an argument against using a type of description that is so situation-specific that it has little usefulness in preparing future teachers. Unfortunately, although the "rule-following" type of description has been used to some extent in training teachers, and used by teachers in describing their own classroom actions in interviews, it has not been used successfully in teacher-training institutions. Nevertheless, while it will not be defended here, the thesis of this and subsequent studies is that the "rule-following" model provides the only type of description that can adequately handle the complexity of teacher-pupil interactions.

Without further elaboration, what you are asked to do is to provide a description of yourself in terms of the "rules" that you follow in maintaining classroom control in this class. Note that "rules" here does not mean the set of rules that you give to the students but rather the rules, policies, strategies, etc., which guide your actions (including those of setting rules for students) relative to classroom control. The term "classroom control" is used here in the broadest sense and includes all actions of the teacher in the classroom. Thus, the rules which a teacher follows in maintaining classroom control subsume actions involving the control of teacher-student relationships, student-task relationships, student-student relationships and student-facilities relationships. These different "areas" of classroom control are represented in the following list of descriptions.

There is a variety of grammatical forms that are employed in the following list and some might appear to be more like "personality descriptions" than "rule descriptions." You do not need to be concerned about such distinctions, however, as your task will simply be to indicate the extent to which you feel that the descriptions at the top of the pages are appropriate or inappropriate in describing you. Thus, if you felt that a statement was very appropriate as a description of you in this class, you would place a mark across the line provided, near (or on) the point indicated as "Extremely appropriate." Conversely, if you felt that the statement did not describe you at all, you would mark the "inappropriate" area (i.e., the bottom half of the line), and if the statement were grossly inaccurate as a description of you in this class, you would place your mark near (or on) the point designated as "Extremely inappropriate." You may use any point on the line to express the degree of appropriateness or inappropriateness of the statement as a description of you in this class.

As much as possible, avoid evaluating the statements as desirable or undesirable. No doubt you will do this to some extent but it should be clearly understood that all of the statements could be regarded as desirable or undesirable (that is, if one were to evaluate them within frameworks that were different from that provided by modern educational philosophy). As we are not concerned with the extent of your agreement with modern educational philosophy, but are concerned with getting themost accurate description of teacher-behavior that we can, this goal is more likely to be achieved if you do not evaluate the descriptions but simply state the extent to which they are descriptive of you in this class.

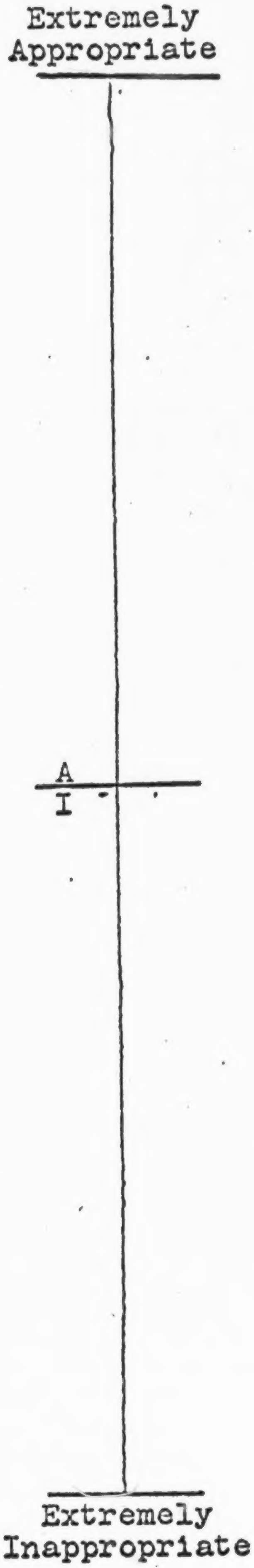
In order to ensure that there will be no missing data, do not omit any of the descriptions as you work through the booklet, but mark them in the order in which they appear.

The last description is somewhat different and involves your judgment of the degree of control which you have in this class.

Thank you for your participation. This completes the data collection for this class. Please do not discuss the descriptions with other teachers until all teachers have been presented with this form. The data collection should be completed by the end of the week.

APPENDIX E

3. THIS TEACHER LETS STUDENTS GET AWAY WITH INCOMPLETE OR SHODDY WORK.


Extremely
Appropriate
A
I
Extremely
Inappropriate

APPENDIX F

Selection of Policy and Classroom Descriptions

POLICY DESCRIPTIONS

Since any action can be regarded as following some policy even if the action occurs only once in a person's life, it might appear that a list of policies which could be used to categorize the actions of teachers would be so arbitrary that it would involve almost random selection. The purpose of this appendix is to indicate the procedures followed in the construction of the initial list of policies. It should be recognized, however, that the ultimate list of policies which would be used in training teachers would be the result of extensive empirical work, dealing not only with the development of such a list, but also the problems involved in teaching Education students how to follow the policies that were included.

Perhaps the promise of an "ultimate list of policies" should be qualified somewhat if such a phrase suggests that there can be constructed a list of policies that would possess some eternal value or truth. It should be obvious that such could not be the case except in the inconceivable situation that all social and technological invention were to be eliminated for a long period of time. Thus, if competence of teachers in dealing with students can be increased by means of training along policy-following lines, presumably those responsible for such training would continue the development of such lists as policies as needed.

The particular policies employed in this study were constructed by the consideration of the teacher-pupil relationship from several conceptual vantage points. In addition, some empirical work in the form of classroom observations, interviews with teachers, and the collection of teacher descriptions from students was involved. It would be difficult to identify with any precision the exact source for any particular policy description used, or to assign any weighting formula to the different conceptual or empirical activities resulting in the final list. Thus, while an attempt will be made here to identify the sources of influence upon the construction of this list, it may be that not all relevant influences will be mentioned.

The conceptual vantage point provided by Haley (1963) in his book Strategies of Psychotherapy began an effort to identify the different aspects of the teacher-pupil relationship that would seem to require "definition." The consideration of the alternatives available to the teacher in defining the teacher-pupil relationship, such as in defining the task, the relationship between students, etc., led to the formulation of some policies. In addition, the attempts by students to control the definition of the relationship with the teacher also indicated some policies which teachers might follow in dealing with such attempts. Although Haley's book is concerned directly with the patient-therapist relationship, his concept of the "definition of the relationship" and the attempts by the therapist and patient to control that definition proved useful in considering the teacher-pupil relationship.

The work of Bales (1950) and the distinction between emotional and task specialists was also suggestive of policies which teachers might follow in dealing with pupils. This notion, combined with the common mystique in psychology concerning "expression of feelings," suggested that policies dealing with emotional expression were probably extremely relevant. Additional suggestions of policies about emotional expression came from the interviews with the teachers and from the "critical incidents" (Flanagan, 1954) collected from freshman college students. These incidents were descriptions of situations in their public school experience which seemed to them to be particularly important in identifying those characteristics which made for success or failure in a teacher's classroom control attempts.

The Minnesota Teachers Attitude Inventory (   ) also contains items which were illustrative of policies which teachers might follow. As mentioned previously, any action could be regarded as following some policy and thus it is possible to translate any person description into policy form. Some of the items on this scale, however, are already very close to being statements of policies which one could follow and this was the kind most likely to be used in developing the list for this study.

In being responsive to the various sources cited, the list of policy descriptions used in this study were not arbitrary in the sense of being selected at random. In addition, those policies which were suggested by several different sources were most likely to be included in the list. (The subsequent reduction of this list is described in the Method section.) Thus, the relevance of a criticism directed toward the "arbitrary" basis for selection of the policies is limited.

In some cases, the wording used in the policy descriptions are verbatim statements taken directly from the various sources identified. In most cases, however, the descriptions were constructed by the author. The criteria employed in such constructions were: 1) Communicating the concept which had been expressed in the various sources mentioned above; 2) Maintaining a level of generality which was appropriately that of the verbatim statements which were used; 3) Using expressions in the descriptions which facilitated the manufacture of illustrations for training purposes. The first and third criteria were relatively easy to meet but the second remains in doubt because of the lack of an adequate criterion as to when it had been achieved. Since it would be the first and third criteria that would be involved in teaching future Education students, however, the second criterion was regarded as adequately met if it were possible to satisfy the third one (i.e., general enough illustrations so that at least a variety of actions could be subsumed under each of the policy descriptions to be used).

CLASSROOM DESCRIPTIONS

The set of classroom descriptions used in this study were developed by the consideration of what was involved in the judgment that a particular classroom "atmosphere" was desirable. From the standpoint of the total development of the student (i.e., in terms of the learning that occurs, not only of subject matter but also of attitudes toward school, authority, etc.) the list seems obviously deficient. The concern with classroom control would seem to necessarily require measurement of the pupil as an extremely complex "product." (In brief, it would involve consideration of pupils as developing Persons.) However, the long range goals of agencies of socialization are related to actions that can be studied at the moment because the probability of achieving such goals is related to the environmental situation at the moment. Thus, a desirable classroom situation now would seem more likely to produce student development that would be judged desirable than a classroom situation judged to be undesirable.

Rather than have a single global estimate of the classroom situation, however, it seemed advisable to have judgments about several conceptually distinct factors which seemed to be involved in the complex judgment. Although a mathmatical total for the eight descriptions used might have provided a somewhat different estimate than that produced by a rating scale dealing with the global judgment, the individual rating scales for the variables identified had the added advantage of providing information which could be used for analyzing the more complex judgment.

Since it is doubtful that anyone would contest the possibility that these eight variables could be involved in the judgment about the desirability of the classroom atmosphere, further elaboration concerning their selection is unnecessary.